



Course Handbook

Building Engineering Education Study Program
Faculty of Engineering
Universitas Negeri Jakarta



Preface

The Course Handbook is a collection of module descriptions for courses in the Building Engineering Education (BEE) Study Program. Courses that covered in this handbook are courses from semester 1 to semester 7 but doesn't include internship, practice teaching skills, and final project. Each module description provides information such as:

- Module identification code
- Name of the course
- Person(s) responsible for each module
- Teaching method(s)
- Credit points
- Objective(s) or learning outcome(s)
- Module content
- Planned use/applicability
- Admission and examination requirements
- Form of assessment
- Recommended literature
- Date of last amendment made



It is hoped that this course handbook can provide an overview of courses available in the BEE study program. Any questions regarding the course hand in the BEE study program, can be asked through the contacts provided in this handbook.

Greetings,
The head of Building Engineering
Education (BEE) Study Program

Contact:
L5 building, 2nd floor, Campus A, Universitas Negeri Jakarta
(+6221) 4700676
admins1ptb@unj.ac.id
<https://ft.unj.ac.id/ptb/>



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Semester 1

List of Courses:

- 01** Pancasila Education
- 02** Student Development
- 03** Engineering Mechanics I
- 04** Mechanics of Materials
- 05** Mathematics I
- 06** Building Construction I
- 07** Basic Physics I
- 08** Engineering Drawing I
- 09** Philosophy Science
- 10** Indonesian Language

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00051122
Subtitle, if applicable	-
Course, if applicable	Pancasila Education
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	University Team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1st semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., cased method) - Structured assignments (i.e., essays and case study) - Practice (i.e., case study: corruption case) <p>The class size for lecture is 40 students. This course meets 35 contact hours for lecture and 42 hours for assignments.</p>
Workload	<p>For this course, students are required to meet a minimum of 90.67 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 26.67 hours for lecture, - 32 hours for structured assignments, - 32 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case</p> <p>Program Learning Outcomes</p> <p>PLO 3: Able to demonstrate an attitude as a professional, ethical educator, nationalist, and pious.</p> <p>Intended Learning Outcomes</p> <p>Attitude (A1): Able to collaborate with teams by applying professional oral and written communication</p> <p>Attitude (A2): Able to demonstrate an attitude as a thoroughly professional, ethical, nationalist, and pious educator</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain <i>Pancasila</i> from the history perspective, basis, and Ideology of the Republic of Indonesia • Able to explain the values of Pancasila as both system of philosophy, ethics, scientific development and anti-corruption values
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<p>Content</p>	<p>Students will learn about:</p> <p>This course aims to understand the values of Pancasila, appreciate the values contained in Pancasila, appreciate and practice the Indonesian state system, based on the 1945 Constitution, understand and live up to the historical values of the nation's struggle and understand efforts to realize the ideals of the Indonesian nation.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must create/produce an innovative, effective learning design regarding the process of socializing and internalizing Pancasila values (precepts 1-5) including a schedule for implementing activities as well as media and or teaching materials. - Students must practice (simulation) the process of socializing the values of Pancasila. - Students must record learning practices and edit them into a complete learning process video with a maximum duration of 10 minutes. - Assignments are done in groups. The maximum number of group members are 2 people. - The learning design manuscript is typed on A4 paper, time new

	<p>roman font 12 spacing 1.15.</p> <p>Form of examination: Written exam: Essay</p>
Media employed	Power Point Presentation, Video, Reading Text, Book.
Reading list	<ol style="list-style-type: none"> 1. Tim Penyusun, 2016. Pendidikan Pancasila. Kemristekdikti, Jakarta 2. Tim Penyusun. 2016. Pendidikan Pancasila. UNJ, Jakarta. 3. Latif, Y. (2014). Mata Air Keteladanan. Mizan 4. Kaelan. 2004. Pendidikan Pancasila. Paradigma, Yagyakarta. 5. Budiardjo, Miriam. 2013. Dasar-Dasar Ilmu Politik. Jakarta: PT Gramedia Pustaka Utama. 6. Yuyun S, Suriasumantri. 1984. Filsafat Ilmu, sebuah Pengantar Populer, Jakarta: Sinar Harapan.
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00052102
Subtitle, if applicable	-
Course, if applicable	Student Development
Semester(s) in which the module is taught	Odd or even
Person responsible for the module	MKU course team
Lecturer	MKU course team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered on both odd and even semester
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., lectures, questions and answers, discussions, assignments, cased methods, project based learning). - Structured assignments (i.e., essays, problem-based learning, case study) - Practice (i.e., case study regarding the development and learning of students) <p>Class of lecture is 40 students. This course meets 35 contact hours for lecture and 42 hours for assignments.</p>
Workload	<p>For this course, students are required to meet a minimum of 90.67 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 26.67 hours for lecture, - 32 hours for structured assignments, - 32 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 1: Able to apply the discipline of pedagogy, namely by planning, implementing, and evaluating learning programs in building engineering program.</p> <p>Intended Learning Outcomes</p> <p>Knowledge (K1): Able to apply learning and learning theory according to the age development of vocational students based on the foundation of Indonesian education</p> <p>Knowledge (K2): Able to implement the planning, implementation, and evaluation of learning in the vocational school majoring Building Engineering by vocational education management.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to master the concept of student development • Able to apply developmental theories in analyzing individual development • Able to apply developmental theories to the implementation of education in kindergarten, Elementary School, Middle School, High School and/or equivalent
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<p>Content</p>	<p>Students will learn about: The basis of individual development, principles of development, aspects of development, stages and characteristics of development, developmental theories, and their implications in facilitating the development of students.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must design innovative, effective and fun models/scenarios/learning procedures/activities based on developmental and learning theories - The result product consists of 3 parts, namely: Learning Implementation Plan / other activity designs, media and or teaching materials, and assessment instruments. - Students must practice (simulation) the learning design that has been produced. - Students must record learning practices and edit them into a complete video of the learning process/activity with a maximum duration of 10 minutes.

	<p>- Assignments are done in group, consists between 3 -5 people.</p> <p>Form of examination: Written exam: Essay</p>
Media employed	Books, Power Point Presentations, Movies
Reading list	<ol style="list-style-type: none"> 1. Ashworth, P. (2000). Psychology and human nature. USA: Psychology Press Ltd. 2. Crain, W.. (2007). Theories of developmental, concepts and applications (3rd Edition). New Jersey: Prentice Hall. 3. Dowling, M.(2001). Young children’s personal, social and emotional development. London: PCP Ltd. 4. Evita, dkk.(2016). Bahan Ajar Perkembangan Peserta Didik. Jakarta : UNJ Press 5. Havighurst (1961). Human development and education. New York: David Mckay Co. 6. Hurlock, E.B. (1950). Child development. New York: McGraw Hill Book Company Inc. 7. Makmun, A.S. (1997). Psikologi kependidikan. Bandung: Remaja Rosdakarya. 8. Miller, P.H. (1993). Theories of developmental psychology. Florida: W.H.Freeman & Company. 9. Papalia, D.E. (2007). Human development (10th Edition). Boston: McGraw-Hill. 10. Pikunas, L. (1976). Human development. Tokyo: McGraw Hill Kogakusha, Ltd. 11. Santrock, J.W. (2013). Life-span development (14th Edition).New York: McGraw-Hill. 12. Santrock, J.W. (2005). Educational psychology. New York: McGraw-Hill. 13. Shaffer, D.R., & Kipp, K. (2014). Developmental psychology: Childhood and adolescence (9th Edition). Belmont, CA: Wadworth. 14. Yusuf LN., S. (2006). Psikologi Perkembangan Anak dan Remaja. Bandung : Remaja. 15. Eggen, P. & Kauchak, D. (2004). <i>Educational Psychology: Windows on lassrooms (sixth edition, international edition)</i>. New Jersey: Pearson Prentice Hall. 16. Slavin, R. E. (2006). <i>Educational psychology</i> (edisi terjemahan). Jakarta: PT Indeks.edition). Boston: Mc Graw Hill. 17. Woolfolk, A. (2007). <i>Educational Psychology (ninth edition, International edition)</i>. Boston: Pearson education, Inc.
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150082
Subtitle, if applicable	-
Course, if applicable	Engineering Mechanics 1
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	Anisah, M.T and Sittati Musalamah, M.T
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to identify data in the problem-solving process in the field of building engineering.
Type of teaching, contact hours	Teaching methods used in this course are: Student Active Learning / Project Based Learning / CBL. Contact hours for lecture is 35 hours, assignments are 42 hours, 42 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Program PLO 4 Able to apply basic science that supports expertise in the field of building engineering education. Intended Learning Outcomes General Competence (GC1):

	<p>Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain structural analysis and its idealization • Able to calculate certain static beam structures & certain static portals • Able to calculate certain static truss structure
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Content	<p>Students will learn about: Able to understand structural analysis and its idealization. Able to calculate certain static beam structure. Capable of calculating certain static Portal structures. Capable of calculating certain static Truss structures.</p>
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Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
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Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times, it is considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class not later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Failure to submit assignments on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course.
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	<p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes. - Students do not use communication tools for purposes that are not related to learning. - Students do not make noises that disturbs the order of learning. - Questions and answers that take place during learning must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD / Projector
Reading list	<ol style="list-style-type: none"> 1. Kassimali, Aslam. Structural analysis. Cengage Learning, 2009. 2. Hibbeler, Russell C., and Tan Kiang. Structural analysis. Upper Saddle River: Pearson Prentice Hall, 2015. 3. Ervianto, Wulfram I. "Soal dan Penyelesaian Analisis Struktur Statik Tertentu" Andi, Yogyakarta (2004). 4. Website Mathalino.com
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151302
Subtitle, if applicable	-
Course, if applicable	Mechanics of Materials
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of Courses
Lecturer	Sittati Musalamah, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to combine scientific concepts in the field of building construction.
Type of teaching, contact hours	Teaching methods used in this course are: Teacher Centered Learning. Contact hours for lecture is 35 hours, assignments are 42 hours, and 42 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology. Intended Learning Outcomes Special Competence (SC1):

	<p>Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the mechanical behavior of the material, torsion bar, and the stresses that occur in a beam due to various loadings • Able to analyze the position of center of gravity and moment of inertia of a cross section, internal forces (flexural moment and shear force) on beams, and analyze the stability of column structural elements • Able to calculate linear plastic beam deflection
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Able to understand the mechanical behavior of materials. - Able to analyze the position of center of gravity and moment of inertia of a cross section. - Able to understand the behavior of torsion bars.. - Able to analyze internal forces (bending moments and shear forces) on beams - Able to understand the stresses that occur in the beam due to various loads. - Able to calculate linear elastic beam deflection. - Analyze the stability of column structure elements.
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times, it is considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Failure to submit assignments on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes. - Students do not use communication tools for purposes that are not related to learning. - Students do not make noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>

Reading list	<ol style="list-style-type: none">1. Gere, James M., and Goodno, Barry J. <i>Mechanics of Materials 8th Edition</i>. Stamford. Cengage Learning: 20132. Hibbeler, R.C. <i>Mechanics of Materials 8th</i>. Boston. Prentice Hall: 2011
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5005-002-2
Subtitle, if applicable	-
Course, if applicable	Mathematic 1
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Riyan Arthur, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to relate basic sciences that are general and pedagogical with real life and offered.
Type of teaching, contact hours	Teaching methods used in this course are: - Project Based Learning Contact hours for lecture is 23 hours, assignments are 28 hours, and 28 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education.</p> <p>Intended Learning Outcomes General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the basics of applied mathematics related to building engineering • Able to explain certain and indefinite integral concepts and their properties • Able to apply the use of certain integrals in the real world
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<p>Content</p>	<p>Students will learn about: Integral Basic Formula; Integral Nature; Partial Integral; Trigonometric Integrals</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students who do not attend, whether with notification or not, more than 20% of the total meetings held do not pass and get an E. (does not meet the administrative requirements based on the rector's regulation). <p>Lateness:</p> <ul style="list-style-type: none"> - 20 minutes late to class is allowed to join the meeting, if class starts at 08:00 a.m. - Being late for class more than 15 minutes is not allowed to attend the meeting, if the class starts at 10:00 a.m. and above. - Delay in submitting assignments for 1-3 days from the specified deadline will result in a reduction of 20 points (from a score range of 0-100 points) - Late submission of assignments more than 3 days from the set time limit are considered not submitting assignments

	<p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the exam or do not submit assignments will be given a score of 0 on the exam/assignment.) <p>Academic fraud:</p> <ul style="list-style-type: none"> - Students must comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be given an E in the Education Research course. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight clothes so that their curves/body shape is clearly visible. - Students are not allowed to wear transparent clothing. - Students are not allowed to wear sandals, torn pants/shirts & dirty clothes. - Students are not allowed to use communication tools for purposes that are not related to learning. - Students are not allowed to make noises that disturbs the order of learning. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight clothes so that their curves/body shape is clearly visible. - Students are not allowed to wear transparent clothing. - Students are required to present their identity in the form of writing, images, or videos. - Students are required to turn on the camera (ON CAM) during the lecture. - Students are not allowed to make noises that disturbs the order of learning (mute the microphone & turn on the microphone if invited) <p>Form of examination: Written exam: Essay</p>
Media employed	Computer/Laptop/Smartphone; Teaching materials (textbooks/ebooks, modules/e-modules); Learning Videos (Tutorials); Related Journal Articles/Proceedings; LMS onlinelearning.unj.ac.id; Zoom/Google Meet/ Microsoft Teams; Ms. Office; Mendeley; Vosviewer; Publish or perish; JASP; Turnitin.

Reading list	<ol style="list-style-type: none">1. Bardley, L. Gerald, Smith Karl J. <i>Calculus</i>, New Jersey: Prentice Hall, Inc., 1995.2. Purcell, Edwin. J, <i>Kalkulus dan Geometri Analitis. Jilid I</i> Jakarta: Erlangga, 2002.3. Stewart, James, <i>Kalkulus Edisi Keempat</i>, Jilid I, PT. Erlangga, 2001.4. Stroud, K.A. <i>Matematika Untuk Teknik</i>, PT. Erlangga, 1992
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150702
Subtitle, if applicable	-
Course, if applicable	Building Construction I
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Rosmawita Saleh, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to combine scientific concepts in the field of building construction.
Type of teaching, contact hours	Teaching method used in this course is Student Active Learning Contact hours for lecture is 23 hours
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education. Intended Learning Outcomes General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process General Competence (GC2):

	<p>Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain basic concept of building construction • Able to explain the basic knowledge regarding parts of building structure
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Content	<p>Students will learn about: Basic knowledge Building Construction, Design and Planning, Structural Systems and Loads on Buildings, Foundations, Floors and Walls, Doors and Windows, Stairs, Roofs and Eaves, Columns, Beams, and Slabs.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Attend face-to-face lectures at least 80% of the ideal number of meetings - Be present in class on time according to the time set/agreed. - There is a notification if you are not present in face-to-face lectures. - The delay tolerance is 10 minutes. If the tolerance time limit is exceeded, the student is considered absent. - Students who do not take the exam or do not submit assignments without notice will be awarded a D on the exam/assignment. - There should be no plagiarism and other forms of violation of norms. - During the lecture, the cellphone is in the off or silent position. - Ask permission (by raising your hand) if you want to talk, ask questions, answer, leave class or other purposes. - Respect each other and don't make noise/disruption/damage in class. - Wear neat and polite clothes during lectures, and in accordance with the rules - Students are not allowed to wear clothes that show their genitalia (tight/transparent). - Students are required to present their identity in the form of writing, images, or videos. <p>Form of examination: Written exam: Essay</p>
Media employed	<p>Laptop, Google Classroom and Google Meet</p>

Reading list	1. Asiyanto.Metode Konstruksi Gedung Bertingkat
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	50050032
Subtitle, if applicable	-
Course, if applicable	Basic Physics 1
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	M. Agphin Ramadhan, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to relate basic sciences that are general and pedagogical with real life.
Type of teaching, contact hours	Teaching methods used in this course are: Student Active Learning Contact hours for lecture is 23 hours
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education. Intended Learning Outcomes General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the

	<p>concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to apply the concept of mechanical physics to building related problems • Able to analyze problems in the field of building engineering in accordance with the concept of building physics
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Content	<p>Students will learn about: Physics concepts in civil engineering, especially building mechanics and physics</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Attend virtual face-to-face lectures at least 80% of the ideal number of meetings (see university academics rules). - Every student must be active and participative in lectures. - Attend online classes on time according to the time set/agreed. - The delay tolerance is 30 minutes. If it passes the tolerance time limit then - the person concerned can still attend the lecture but is not recorded as a - presence - Every student must be active and participative in lectures. - Respect each other and don't make noise/disruption/damage in online classes - Wear neat and polite clothes during lectures, and according to the rules, - There will be a notification if you are not present in the face-to-face lecture. - During the teleconference, the microphone is muted unless requested permission to speak - Asking permission (by raising your hand) if you want to talk, ask, or answer - Respect each other and don't make noise/disruption/damage in class. - There should be no plagiarism and other forms of violation of norms. <p>Form of examination:</p>

	Written exam: Essay
Media employed	Direct Whiteboard and Power Point Presentation.
Reading list	<ol style="list-style-type: none"> 1. Megson. 2014. Structural and Stress Analysis, 3rd Ed., Elsevier, Waltham USA. 2. Hibbeler, R.C. 2014. Statics and Mechanics of Materials, 4th Ed., Pearson Prentice Hall, NYUSA. 3. Young, D.F., Munson, B.R., Okiishi, T.H., Huebsch, W.W., 2011, A Brief Introduction to Fluid Mechanics, 5th Edition, J.Wiley & Sons, Inc., NJ. 4. White, Frank M. 2011. Fluid Mechanics, 7th Edition, The McGraw-Hill Book Co., New York. 5. Jim Breithaupt. 2000. New Understanding Physics. For Advanced Level. Fourth Edition. U.K: Stanley Thornes Publishers. Ltd. 6. Loo Kwok Wai. 2006. Longman Advanced Level Physics. Singapore: Pearson Education South Asia Pte. Ltd. 7. Mikrajuddin Abdullah. 2016. Fisika Dasar I. Bandung: ITB
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54231102-2
Subtitle, if applicable	-
Course, if applicable	Engineering Drawing I
Semester(s) in which the module istaught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Doddy Rochadi, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to combine scientific concepts in the field of building construction.
Type of teaching, contact hours	Teaching methods used in this course are: Student Active Learning Contact hours for lecture is 23 hours
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all classassignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education. Intended Learning Outcomes General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the

	<p>concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain basic concept of drawing technic • Able to draw parts of building and its details according to the rules of technical drawing
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Content	<p>Students will learn about: Basic concepts of knowledge, drawing techniques; use of drawing-forming tools and materials, Presentation of drawing presentations using line techniques, letters and building engineering symbols, understanding of projection science, understanding of Computer Aided Design (CAD) in realizing sketches, detailed drawings, and drawings of simple building construction structures environmentally friendly</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students attend face-to-face lectures at least 80% of the ideal number of meetings. - Every student must be active and participative in lectures. - Lecturers and students arrive in class on time according to the time set/agreed. - There is a notification if you are not present in face-to-face lectures. - During the lecture, the cellphone is in the off or silent position. - Ask for permission (by raising your hand) if you want to talk, ask questions, answer, leave class or other purposes. - Mutual respect for maintaining order and cleanliness in the room. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD
Reading list	<ol style="list-style-type: none"> 1. ._____, 1993, AutoCADr Release 12, Installation and Performance Guide, Autodesk Inc. 2. Dep.PU, Standard Nasional Indonesia, Jakarta, 2008. 3. Gunadi, FX Sutiono, 1988, Seni Merancang dengan AutoCAD cetakan ketiga, PT. Elex Media Komputindo, Jakarta; 4. Groover, Mikell P dan E.W, JR. (1987). CAD/CAM : Computer Aided Design dan Manufacturing. Prentice Hall of Indoa.

	<ol style="list-style-type: none"> 5. Handi Chandra (2005), AutoCAD 2D, Maxikom. 6. Luzadder, Waren J. (1986). Fundamentals of Engineering Drawing (With an Introduction to Interactive Computer Graphic for Design and Production),9th Edition, Prentice Hall. 7. Sato, Takeshi G.; N. Sugiharso H. (1996). Menggambar Mesin Menurut Standar ISO. Pradnya Paramitha. 8. Soetarman,Soekarto,1977, Menggambar Teknik Bangunan I. Direktorat Pendidikan Menengah Kejuruan. Departemen Pendidikan dan Kebudayaan. 9. Wie, Yap.Ir., 1987, Pengantar Praktis Penggunaan AutoCAD, Andi Offset, Yogyakarta.
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	0005-200-2
Subtitle, if applicable	-
Course, if applicable	Philosophy Science
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	R. Eka Murtinugrah, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to relate basic sciences that are general and pedagogical with real.
Type of teaching, contact hours	Teaching methods used in this course are: <ul style="list-style-type: none"> - Student Center Learning - Blended Learning <p>Contact hours for lecture is 23 hours, assignments are 28 hours, and 28 hours for individual study.</p>
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: <ul style="list-style-type: none"> - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 3: Able to demonstrate an attitude as a professional, ethical educator, nationalist, and pious.</p> <p>Intended Learning Outcomes Attitude (A1): Able to collaborate with teams by applying professional oral and written communication Attitude (A2): Able to demonstrate an attitude as a thoroughly professional, ethical, nationalist, and pious educator</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the basic concept of knowledge, philosophy, and science • Able to determine simple scientific writing with the right logical thinking skills
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<p>Content</p>	<p>Students will learn about: Basic Concepts of Knowledge, Philosophy and Science; Philosophy of Science and Its Object of Study, Ontological, Epistemological and Axiological Foundations; Development of Science, Culture, Language and Technology; Constructivism Concept and Scientific Thinking</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Attendance in face-to-face classes should be at least 80% of the ideal number of meetings (see university academic rules). - Be present in class on time according to the time set/agreed. - There should be a notification if student do not attend the face-to-face class. <p>Lateness:</p> <ul style="list-style-type: none"> - The delay tolerance is 10 minutes. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment.

	<p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Wear polite and neat clothes (shirts) and are not allowed to wear t-shirts. - Students do not use communication tools for purposes that are not related to learning. - Ask permission (by raising hand) if student want to talk, ask questions, answer, leave class or other purposes. - Every student must be active and participative in class. - During the class, the cellphone is in the off or silent position. - Respect each other and do not make noise, disturbance or damage in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place. - Students are required to present their identity in the form of writing, images, or videos. - Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes. - During the class, the cellphone is in the off or silent position. - Ask for permission (by activating the raise hand or unmute voice feature) if students want to talk, ask questions, answer, leave class or other needs. - Be orderly and do not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. Kumae, Ranjit. <i>Research Methodology, A Step By Step Guide For Beginners</i>. Longman, 1999. 2. Mudyahardjo, Redja. <i>Filsafat Ilmu Pendidikan</i>, Bandung: PT. Remaja Rosdakarya, 2002 3. Reid, S.P. <i>Berpikir Strategis</i>. PT. Bhuna Ilmu Populer, 2006. 4. Sadulloh, Uyoh. <i>Pengantar Filsafat Pendidikan</i>. Bandung: Alfabeta, 2008. 5. Sugiyono. <i>Metode Penelitian Kombinasi</i>. Bandung : Alfabeta Bandung, 2011.

	<p>6. Sumantri, Suria dan Yuyun S. <i>Filsafat Ilmu, Sebuah Pengantar Popular</i>. Jakarta: Gramedia, 1984.</p> <p>7. Sumantri, Suria dan Yuyun S. <i>Ilmu dalam Perspektif</i>. Jakarta: Gramedia, 1984.</p> <p>8. Suparno, Paul. <i>Filsafat Konstruktivisme dalam Pendidikan</i>. Yogyakarta: Kanisius, 2001.</p>
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00051142
Subtitle, if applicable	-
Course, if applicable	Bahasa Indonesia
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	University Team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., group investigation, small group discussion, case study, and video-based learning) - Structured assignments (i.e., essays and case study) <p>Class of lecture is 30 students. Contact hours for lecture is 27 hours, assignments are 32 hours</p>
Workload	<p>For this course, students are required to meet a minimum of 91 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 27 hours for lecture, - 32 hours for structured assignments, - 32 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 4: Able to apply basic science that supports expertise in the field of building engineering education</p> <p>Intended Learning Outcomes</p> <p>General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to apply the right variety of language and accuracy of selection (diction) according to the situation • Able to compose an effective paragraph to express ideas • Able to compose scientific article according to Indonesian Language rules that are in accordance with PUEBI
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<p>Content</p>	<p>Students will learn about:</p> <p>This course aims to develop students' personalities so that they are able to speak Indonesian properly and correctly; good personality, smart and caring for others. This language education includes: a good personality, intelligent and caring; the meaning and function of Indonesian as a national and state culture, variety of languages, grammar, scientific language, words, terms, definitions, essay planning, scientific essay development, taking into account paragraph development, sentence effectiveness, word choice, reasoning in essays, written words and spelling, notation techniques, scientific writing techniques.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must not be late. The delay tolerance is 10 minutes. If you pass the tolerance time limit, you will not be allowed to take the exam. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade.

	Form of examination: Written exam: multiple choice
Media employed	Power Point Presentation, Video, and Youtube
Reading list	<ol style="list-style-type: none"> 1. Tim Penyusun. 2016. Bahasa Indonesia untuk Perguruan Tinggi. Cet. I. Jakarta: Kementerian Riset, Teknologi dan Pendidikan Tinggi Republik Indonesia. 2. Amran Tasai. 2000. Cermat Berbahasa Indonesia di Perguruan Tinggi. Jakarta: MSP. 3. Dendy Sugono. 1989. Berbahasa Indonesia dengan Benar. Jakarta: PT Priastu. 4. Depdiknas. Dirjen Pendidikan Tinggi, Direktorat Ketenagaan. 2006. Diklat. "Acuan Pembelajaran Mata Kuliah Pengembangan Kepribadian Bahasa Indonesia". Jakarta. 5. Kemendikbud. 2015. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 50 Tahun 2015 tentang PUEBI. Jakarta. 6. Lamudin Finoza. 2003. Komposisi Bahasa Indonesia untuk Mahasiswa Nonjurusan Bahasa. Jakarta: Diksi Insan Mulia. 7. Widjono Hs. 2007. Bahasa Indonesia: Mata Kuliah Pengembangan Kepribadian di Perguruan Tinggi. Cet. Ke-2. Edisi Revisi. Jakarta: Grasindo. 8. Maidar, dkk. 1999. Pembinaan Keterampilan Menulis Bahasa Indonesia. Jakarta: Erlangga. 9. Mustakim. 2016. Seri Penyuluhan Bahasa Indonesia: Bentuk dan Pilihan Kata. Jakarta: Pusbinbangsa. 10. Anton M. Moeliono, dkk. 2017. Tata Bahasa Baku Bahasa Indonesia. Jakarta: Badan Pengembangan dan Pembinaan Bahasa, Kemendikbud. http://repositori.kemdikbud.go.id/16351/1/Tata%20Bahasa%20Baku%20Bahasa%20Indonesia%20edisi%20keempat.pdf 11. Sri Suharmini W. "Tips untuk Mahasiswa: Penulisan Bibliografi". Komunika: Media Komunikasi Civitas Akademika Universitas Terbuka. Nomor 29/ Tahun IX/2002. Hlm. 58-59. 12. Sriyanto. 2016. Seri Penyuluhan Bahasa Indonesia: Ejaan. Jakarta: Pusbinbangsa. 13. Sry Satrya Tj.W.S. 2016. Seri Penyuluhan Bahasa Indonesia: Kalimat. Jakarta: Pusbinbangsa. 14. Suladi. 2016. Seri Penyuluhan Bahasa Indonesia: Paragraf. Jakarta: Pusbinbangsa. 15. Suparno dan Mohammad Yunus. 2002. Keterampilan Dasar Menulis. Jakarta: Pusat Penerbitan UT. 16. Tim Penulis Bahasa Indonesia UT-ASMI. 2002. Buku Materi Pokok Bahasa Indonesia. Edisi Kedua. Jakarta: Pusat Penerbitan Universitas Terbuka. 17. Tim Pengajar MKU Bahasa Indonesia. 2015. Bahasa Indonesia: Bahan Ajar MPK Bahasa Indonesia. Jakarta: UPT

	<p>MKU UNJ.</p> <p>18. 2017. Undang-undang Republik Indonesia Nomor 24 Tahun 2009 tentang Bendera, Bahasa, dan Lambang Negara, serta Lagu Kebangsaan. Jakarta: Badan Pengembangan dan Pembinaan Bahasa, Kemendikbud.</p> <p>19. http://badanbahasa.kemdikbud.go.id/lamanbahasa/node/49 tautan buku seri penyuluhan Badan Bahasa.</p> <p>20. Modul UT. http://repository.ut.ac.id/4812/1/PBIN4328-M1.pdf.</p> <p>21. Modul UT. http://repository.ut.ac.id/4059/1/MKDU4110-M1.pdf.</p> <p>22. http://repository.ut.ac.id/4034/2/PDGK4204-M1.pdf</p> <p>23. https://dinus.ac.id/repository/docs/ajar/(20140904)_Bhs-IndoBab_1_Mengeplorasi_Teks_Akademik-final-edit.pdf</p>
Date of last amendment made	4 July 2016

Semester 2

List of Courses:

- 01** Religion Education
- 02** Educational Foundation
- 03** Engineering Mechanics II
- 04** Mathematics II
- 05** Building Construction II
- 06** Stone Practice
- 07** Engineering Drawing II and CAD
- 08** Concrete Technology
- 09** Building Material Science
- 10** Basic Physics Practice

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00052033
Subtitle, if applicable	-
Course, if applicable	Islamic Religion Education
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of the course
Lecturer	University Team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., group investigation, small group discussion, case study, and video-based learning) - Structured assignments (i.e., essays and case study) <p>Class size of lecture is 30 students. Contact hours for lecture is 35 hours, and assignments are 42 hours</p>
Workload	<p>For this course, students are required to meet a minimum of 119 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 35 hours for lecture, - 42 hours for structured assignments, - 42 hours for individual study,
Credit points	3 credit points (equivalent with 4.5 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 3: Able to demonstrate an attitude as a professional, ethical educator, nationalist, and pious</p> <p>Intended Learning Outcomes</p> <p>Attitude (A1): Able to collaborate with teams by applying professional oral and written communication</p> <p>Attitude (A2): Able to demonstrate an attitude as a thoroughly professional, ethical, nationalist, and pious educator</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the philosophical and theological foundations of religious education in higher education • Able to apply solutions to religious problems related to humanitarian and state problems • Able to develop religious insight that is a blessing to the universe
<p>Content</p>	<p>Students will learn about:</p> <p>This course introduces the teachings of Islam in general. Teachings concerning human relations with God (aspects of worship and mu'amalah) and teachings relating to human relations with humans and nature (mu'amalah mu'amalah/human social relations). Furthermore, this course is also a deepening and development of Islamic thought (intellectuality) in various aspects as well as conducting studies on the methodology of scientific thinking in an Islamic perspective, so that students can recognize and understand the basic concepts of Islamic teachings and can develop Islamic thought. And can live moral values and divine values and can be implemented in the life of society, nation and state.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>

Study and examination requirements and forms of examination	Study and examination requirements: <ul style="list-style-type: none"> - Students must be present 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade. Form of examination: Written exam: Essay
Media employed	Power Point Presentation
Reading list	<ol style="list-style-type: none"> 1. Amrumllah Ahmad. Dkk. 1994 Prospek Hukum Islam dalam Kerangka Pembangunan Hukum Nasional di Indonesia, Sebuah Kenangan 65 Tahun Prof. DR. H. Bustanuk Arifin, AH, Jakarta, Pengurus Pusat Ikatan Hakim Peradilan Agama. 2. Darji Darmodiharjo dan Shidarta.1 1995 Pokok-pokok Filsafat Hukum apa dan bagaimana Filsafat Hukum Indonesia, Jakarta, PT. Gramedia Pustaka Utama. 3. Fathurrahman Djamil, 1997 Filsafat Hukum Islam (Bagian Pertama), Jakarta, Logis Wacana Ilmu. 4. J.N.D. Aderson, 1994 Hukum Islam di Dunia Modern, Penerjemah Machnun Husein, edisi revisi, Yogyakarta, Tiara Wacana Yogya.
Date of last amendment date	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00053074
Subtitle, if applicable	-
Course, if applicable	Educational Foundation
Semester(s) in which the module is taught	Odd or even
Person responsible for the module	MKDK course team
Lecturer	MKDK course team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course offered in odd or even semesters.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., assignment, cased-based learning, project-based learning). - Structured assignments (i.e., essays, project-based learning, cased-based learning) - Practice (i.e., case study about the model and development of education in Indonesia). <p>Class size of lecture is 40 students. Contact hours for lecture is 70 hours, and assignments is 84 hours</p>
Workload	<p>For this course, students are required to meet a minimum of 181.34 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 53.34 hours for lecture, - 64 hours for structured assignments, - 64 hours for individual study.
Credit points	4 credit points (equivalent with 6 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all classassignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all classassignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 1: Able to apply the discipline of pedagogy, namely by planning, implementing, and evaluating learning programs in building engineering education</p> <p>Intended Learning Outcomes</p> <p>Knowledge (K1): Able to apply learning and learning theory according to the age development of vocational students based on the foundation of Indonesian education</p> <p>Knowledge (K2): Able to implement the planning, implementation, and evaluation of learning in the SMK Building Engineering by vocational education management</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to develop concepts and theories about education, and its relation to human development. • Able to map various problems in the implementation of education related to the concepts, theories, foundations, and principles of education • Able to formulate the history of education in Indonesia in the context of contemporary education
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<p>Content</p>	<p>Students will learn about: The concept of education, the concept of education, the relationship between humans and education, the foundations, principles and principles of education, the history of education in Indonesia, as well as educational problems in educational practice.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must design a model/scenario/procedure of an education model in Indonesia. - Assignments are made for 4 weeks, and are submitted not later than the final exam.. - Assignments are done in groups. The maximum number of group members are 5 people. - The learning design manuscript is typed on A4 paper, time new roman font 12 spacing 1.15. - Learning videos are stored in Google Drive and or YouTube channels. The link was sent to the lecturer.

	Form of examination: Written exam: Essay
Media employed	Books, Articles, Reading Texts, Powerpoint Presentations, Videos
Reading list	1. Newspaper, magazine, internet dan other mass media. 2. Cases from youtube.
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150112
Subtitle, if applicable	-
Course, if applicable	Engineering Mechanics 2
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of the course
Lecturer	Sittati Musalamah, MT and Ririt Aprilin S, M.Sc.Eng
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester to identify data in the problem-solving process in the field of building engineering.
Type of teaching, contact hours	Teaching methods used in this course are: Problem-based Learning. Contact hours for lecture is 35 hours, assignments are 42 hours, and 42 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Engineering Mechanics 1

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes</p> <p>Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes:</p> <ul style="list-style-type: none"> • Able to analyze deformation response of certain static structural beam • Able to analyze continuous beams of statically indeterminate structure
<p>Content</p>	<p>Students will learn about:</p> <p>Students are able to analyze the deformation response of certain static structural beams.</p> <p>Students are able to analyze continuous beams of statically indeterminate structures.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times, it is considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class not later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Failure to submit assignments on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes. - Students do not use communication tools for purposes that are not related to learning. - Students do not make noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>

Reading list	<ol style="list-style-type: none">1. RC Hibbeler, <i>Structural Analysis</i>, 9th Edition, USA: John Wiley & Sons, 2014.2. Aslam Kassimali, <i>Structural Analysis</i>, 4th Edition, USA: Cengage Learning, 20113. Website Mathalino.com
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5005-002-2
Subtitle, if applicable	-
Course, if applicable	Mathematic 2
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Riyan Arthur, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 1 st semester to relate basic sciences that are general and pedagogical with real life.
Type of teaching, contact hours	Teaching methods used in this course are: - Project Based Learning Contact hours for lecture is 23 hours, assignments are 28 hours, and 28 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

Module objectives/intended learning outcomes	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to apply integration techniques • Able to apply the use of certain levels of integral in real world
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Content	<p>Students will learn about: Continuous Integral; Discontinuous Integral; Area.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Attendance:</p> <ul style="list-style-type: none"> - Students who do not attend, whether with notification or not, more than 20% of the total meetings held do not pass and get an E. (does not meet the administrative requirements based on the rector's regulation). <p>Lateness:</p> <ul style="list-style-type: none"> - 20 minutes late to class is allowed to join the meeting, if class starts at 08:00 a.m. - Being late for class more than 15 minutes is not allowed to attend the meeting, if the class starts at 10:00 a.m. and above. - Delay in submitting assignments for 1-3 days from the specified deadline will result in a reduction of 20 points (from a score range

	<p>of 0-100 points)</p> <ul style="list-style-type: none"> - Late submission of assignments more than 3 days from the set time limit is considered not submitting assignments <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the exam or do not submit assignments will be given a score of 0 on the exam/assignment.) <p>Academic fraud:</p> <ul style="list-style-type: none"> - Students must comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. - Acts of plagiarism and cheating in the exam will be given an E in the Education Research course. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight clothes so that their curves/body shape is clearly visible. - Students are not allowed to wear transparent clothing. - Students are not allowed to wear sandals, torn pants/shirts & dirty clothes. - Students are not allowed to use communication tools for purposes that are not related to learning. - Students are not allowed to make noises that disturbs the order of learning. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight clothes so that their curves/body shape is clearly visible. - Students are not allowed to wear transparent clothing. - Students are required to present their identity in the form of writing, images, or videos. - Students are required to turn on the camera (ON CAM) during the lecture. - Students are encourage not to make noise that disturbs the order of learning (mute the microphone & turn on the microphone if invited) <p>Form of examination: Written exam: Essay</p>
Media employed	Computer/Laptop/Smartphone; Teaching materials (textbooks/ebooks, modules/e-modules); Learning Videos (Tutorials); Related Journal Articles/Proceedings; LMS onlinelearning.unj.ac.id; Zoom/Google Meet/ Microsoft Teams; Ms. Office; Mendeley; Vosviewer; Publish or perish; JASP; Turnitin.

Reading list	<ol style="list-style-type: none">1. Bardley, L. Gerald, Smith Karl J. <i>Calculus</i>, New Jersey: Prentice Hall, Inc., 1995.2. Purcell, Edwin. J, <i>Kalkulus dan Geometri Analitis. Jilid I</i> Jakarta: Erlangga, 2002.3. Stewart, James, <i>Kalkulus Edisi Keempat</i>, Jilid I, PT. Erlangga, 2001.4. Stroud, K.A. <i>Matematika Untuk Teknik</i>, PT. Erlangga, 1992
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-071-2
Subtitle, if applicable	-
Course, if applicable	Building Construction 2
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Santoso Sri Handoyo, M.T.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester to combine scientific concepts in the field of building construction.
Type of teaching, contact hours	Teaching methods used in this course are: - Case-based Learning Contact hours for lecture is 23 hours, assignments are 28 hours, and 28 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Building Construction 1

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 6:</p> <p>Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes</p> <p>Special Competence (SC1):</p> <p>Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2):</p> <p>Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5):</p> <p>Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6):</p> <p>Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain parts of roof construction, truss, stairs and foundation • Able to explain the principles of high-rise building construction
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<p>Content</p>	<p>Students will learn about:</p> <p>Definition of Roads, Roads Owned Areas, Laws and Regulations Governing Roads; Field Survey and Testing (Field and Laboratory) Road Works; Geometric Planning of the Road; Road Pavement Layer; Road Drainage, Road Complementary Buildings, and Road Marks and Signs; Definition, History of Bridges, and Types of Bridges; Bridge Planning Process; Bridge Foundation Works; Irrigation Building Construction; Irrigation Building Foundations; Irrigation Building Maintenance.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>

Study and examination requirements and forms of examination

Attendance:

- Attendance in face-to-face classes should at least 80% of the ideal number of meetings (see university academic rules).
- Be present in class on time according to the time set/agreed.
- There should be a notification if student do not attend the face-to-face class.

Lateness:

- The delay tolerance is 10 minutes. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value.

Not taking exams/not submitting assignments:

- Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment.

Academic fraud:

- There should be no plagiarism and other forms of violation of norms.

Ethics in offline classes:

- Wear polite and neat clothes (shirts) and are not allowed to wear t-shirts.
- Students do not use communication tools for purposes that are not related to learning.
- Ask permission (by raising hand) if student want to talk, ask questions, answer, leave class or other purposes.
- Every student must be active and participative in class.
- During the class, the cellphone is in the off or silent position.
- Respect each other and do not make noise, disturbance or damage in the classroom.

Ethics in online classes:

- Wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place.
- Students are required to present their identity in the form of writing, images, or videos.
- Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes.
- During the class, the cellphone is in the off or silent position.
- Ask for permission (by activating the raise hand or unmute voice feature) if students want to talk, ask questions, answer, leave class or other needs.

	<p>- Be orderly and do not activate the sound (unmute), when the lecturer explains the material.</p> <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. AASHTO. <i>A Policy on Geometric Design of Highway and Streets</i>. 1984. 2. Clarkson. <i>Highway Engineering</i>. John Wiley and Sons, 1996. 3. Hendarmin, Affandi. <i>Jalan Raya</i>. Jakarta: FT UNJ, 2007. 4. Hendarmin, Affandi. <i>Pemindahan Tanah Mekanis</i>. Jakarta: FT UNJ, 2007. 5. Hendarsin, Shirley L. <i>Perencanaan Teknik Jalan Raya</i>. Bandung: Politeknik Negeri Bandung, 2000. 6. Rostiyanti, Susi Fatena. <i>Alat Berat Untuk Proyek Konstruksi</i>. Jakarta: Rineka Cipta, 2008. 7. Soekirman, Silvia. <i>Dasar-dasar Perencanaan Geometrik Jalan</i>. Jakarta: Nova, 2000. 8. Supriyadi, Bambang and Agus Setyo Munharto. <i>Jembatan</i>. Yogyakarta: Beta Offset, 2007. 9. Departemen Pekerjaan Umum. Direktorat Jenderal Bina Marga. <i>Peraturan Perencanaan Geometrik Jalan Perkotaan</i>. 1998. 10. Departemen Pekerjaan Umum. Direktorat Jenderal Bina Marga. <i>Tata Cara Perencanaan Geometrik Jalan Antar Kota (TPGJAK)</i>. 1997. 11. Departemen Pekerjaan Umum. Direktorat Jenderal Bina Marga. <i>Indonesian Highway Capacity Manual</i>. 1997.
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150792
Subtitle, if applicable	-
Course, if applicable	Stone Practice
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of Courses
Lecturer	Drs. Rosmawita Saleh, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester to apply building engineering practices, both at the planning, implementation, and evaluation stages.
Type of teaching, contact hours	Teaching methods used in this course are Student Active Learning Contact hours for lecture is 47 hours
Workload	For this course, students required to meet a minimum of 103 hours in one semester, which consist of: - 47 hours for lecture, - 28 hours for structured assignments, - 28 hours for pindividual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes, practicum and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards Intended Learning Outcomes Special Competence (SC3): Able to practice jobs in the field of building engineering education using hardware Special Competence (SC4):

	<p>Able to operate software related to job analysis in the field of building engineering education</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to arrange thick brick and 1 brick elongated shape, angled and crossed, plastering, and lining walls • Able to install tile and porcelain on the wall • Able to make foundations with river rocks as well as assemble column reinforcement bars
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<p>Content</p>	<p>Students will learn about:</p> <p>The practice of making wall connections with 1/2 brick as well as 1 brick, elongated (straight), angled (L), crossed (+), combined (1/2 x 1) bricks, making wall finishes, plastering, repairing, slapping (splashing) walls, installing floor tiles and installing porcelain walls as well as assembling/assembling beam/column reinforcement.</p>
<p>Forms of Assessment</p>	<p>The assessment is carried out based on a written exam, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students who do not attend, whether with notification or not, more than 20% of the total meeting are considered not to pass and get an E - Late entry to class for minutes is allowed to attend lectures, if class starts at 8 o'clock. - Late entry to class more than 1-15 minutes is not allowed to attend the lecture, if class starts at 9 onwards. - Delay in submitting the jobsheet for 1-7 days from the specified deadline will result in a reduction of 20 points from a total of 1-100 points. - Late submission of the jobsheet for more than 7 days from the specified deadline will get a score of 0. - Students who do not take the exam or do not submit the jobsheet without notice will be awarded a D on the exam/assignment. - Students must comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be given an E score on the exam. - Students are not allowed to wear clothes that show their genitals (tight/transparent) and wear sandals - Students are required to wear Lab Coats and shoes - Students are encourage not to use communication tools for purposes that are not related to learning. - Students are encourage not make noise that disturbs the order of learning.

	<ul style="list-style-type: none"> - Students are not allowed to wear clothes that show their genitalia (tight/transparent). - Students are required to present their identity in the form of writing, images, or videos <p>Form of examination: Written exam: Essay</p>
Media employed	Laboratory Equipment, Zoom Meeting
Reading list	<ol style="list-style-type: none"> 1. Supribadi, Ketut, "Ilmu Bangunan Gedung , Seri A Bangunan Sipil", Bandung : Amriko, 1986. 2. Soemadi, R., "Konstruksi Bangunan Gedung-gedung", Bandung : ITB Bandung, disi 1, 1980. 3. Frick, Heinz, Setiawan, Pujo L., "Ilmu Konstruksi Seri Kelima", Semarang : Kanisius, 2007. 4. H. Julistiono, "Menggambar Struktur Bangunan", Cetakan Kedua, Jakarta : Grasindo, 2005. 5. Daryati, "Iopsheet PRAKTIK BATU/BETON I" Edisi Pertama, Jakarta : FT UNJ, 2000. 6. Jobsheet "Praktik Batu Universitas Gajah Mada" tahun 2010 7. Departemen P& K, "Lembaran Kerja Batu dan Kayu", Jakarta : Dir. Pendidikan Menengah Kejuruan, 1981. 8. Departemen P& K, "Teori dan Praktik Kejuruan Dasar Bangunan", Jakarta : Dir. Pendidikan Menengah Kejuruan, 1981. 9. Rincian Rencana Kegiatan (Satuan Acara Perkuliahan), ditulis dalam bentuk matrik,
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151292
Subtitle, if applicable	-
Course, if applicable	Engineering Drawing II and CAD
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Arris Maluana , S.T, M.T
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester to operate building engineering software.
Type of teaching, contact hours	Teaching methods used in this course are Student Center Learning Contact hours for lecture is 23 hours
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards Intended Learning Outcomes Special Competence (SC3): Able to practice jobs in the field of building engineering education using hardware

	<p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to operate AutoCAD software in engineering building learning process • Able to draw in 2D and 3D using AutoCAD software for building structures • Able to draw 3D using AutoCAD software for building structures
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<p>Content</p>	<p>Students will learn about: Operate AutoCAD software in learning engineering drawings of buildings, 2D drawing using AutoCAD software, Drawing 3D using Autodesk Revit software</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Attend face-to-face lectures at least 80% of the ideal number of meetings - Be present in class on time according to the time set/agreed. - There is a notification if you are not present in face-to-face lectures. - The delay tolerance is 10 minutes. If the tolerance time limit is exceeded, the student is considered absent. - Students who do not take the exam or do not submit assignments without notice will be awarded a D on the exam/assignment. - There should be no plagiarism and other forms of violation of norms. - During the lecture, the cellphone is in the off or silent position. - Ask permission (by raising your hand) if you want to talk, ask questions, answer, leave class or other purposes. - Respect each other and don't make noise/disruption/damage in class. - Wear neat and polite clothes during lectures, and in accordance with the rules - Students are not allowed to wear clothes that show their genitalia (tight/transparent). - Students are required to present their identity in the form of writing, images, or videos. <p>Form of examination: Written exam: Essay</p>

Media employed	Laptop/Computer, LCD
Reading list	<ol style="list-style-type: none"> 1. Handi Chandra. 2000. Latihan dan Soal Gambar 2 Demensi dalam AutoCAD 2000. Jakarta : PT Elex Media Komputindo. 2. Handi Chandra. 2000. Latihan dan Soal Gambar 3 Demensi dalam AutoCAD 2000. Jakarta : PT Elex Media Komputindo. 3. Handi Chandra. 2000. Referensi Praktis AutoCAD 2000. Jakarta : PT Elex Media Komputindo. 4. Hari Aria Soma. 1998. Buku Latihan AutoCAD. Jakarta : PT Elex Media Komputindo. 5. Hari Aria Soma. 1999. Mahir Menggunakan AutoCAD Release 14. Jakarta : PT Elex Media Komputindo. 6. Sofi Ansori. 1999. Mengupas tuntas AutoCAD 14. Jakarta : PT Elex Media Komputindo
Date of last amendment made	9 January 2017

hhModul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150822
Subtitle, if applicable	-
Course, if applicable	Concrete Technology
Semester(s) in which the module is taught	II
Person responsible for the module	Lecturer of the course
Lecturer	Anisah, MT and Kusno Adi Sambowo, ST.,Ph.D.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester to design building engineering based on existing materials.
Type of teaching, contact hours	Teaching methods used in this course are: Student Active Learning Contact hours for lecture is 35 hours, assignments are 42 hours, and 42 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Building Materials Course
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology Intended Learning Outcomes

	<p>Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain insights about concrete technology and its development • Able to explain the nature of concrete • Able to explain concrete quality control
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<p>Content</p>	<p>Students will learn about:</p> <p>Able to understand concrete Insight. Able to master the properties of the constituent materials of concrete. Able to master the properties of fresh concrete. Able to master the properties of hard concrete. Able to understand concrete quality control. Able to understand the development of concrete.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times, it is considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class not later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed

	<p>to attend lectures.</p> <ul style="list-style-type: none"> - Assignments are submitted on time as agreed. Failure to submit assignments on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes. - Students are encouraged not to use communication tools for purposes that are not related to learning. - Students are encouraged not to make noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD / Projector
Reading list	<ol style="list-style-type: none"> 1. Nugraha, Paul. 2007. Teknologi Beton: Dari Material, pembuatan ke Beton Kinerja Tinggi. Jakarta: Andi dan LPPM Universitas Kristen Petra. 2. Mulyono, Tri 2010. Teknologi Beton, Jakarta: Erlangga
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150042
Subtitle, if applicable	-
Course, if applicable	Building Materials Science
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of the course
Lecturer	Kusno Adi Sambowo, ST.,Ph.D and Drs. Prihantono, M.Eng
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester to combine scientific concepts in the field of building construction.
Type of teaching, contact hours	Teaching methods used in this course are: Cased Based Learning. Contact hours for lecture is 35 hours, assignments are 42 hours, and 42 hours for individual study.
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the appropriate physical and mechanical properties testing for various building materials • Able to explain the types of building materials
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Able to explain appropriate physical and mechanical properties testing for various building materials. - Able to understand the types of building materials.
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times is considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class not later than 15 minutes after the class schedule starts.

	<ul style="list-style-type: none"> - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Failure to submit assignments on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes. - Students are encouraged not use communication tools for purposes that are not related to learning. - Students are encouraged not to make noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD / Projector
Reading list	<ol style="list-style-type: none"> 1. Ahmad, Rosman. 2007. Bahan Bangunan sebagai Dasar Pengetahuan. Jakarta : Penerbit Bangun Cipta Pustaka. 2. Awaludin, Ali dan Inggar Septhia Irawati. 2010. Konstruksi Kayu. Yogyakarta: Biro Penrbit Teknik Sipil Universitas Gadjah mada. 3. Mediastika, Chritina. 2009. Material Akustik Bangunan. Yogyakarta: Penerbit Andi. 4. Morisco. 2006. Bahan Kuliah Teknologi Bambu, Program Magister Teknologi Bahan Bangunan, Universitas Gajah Mada, Yogyakarta.

	<ol style="list-style-type: none">5. Pandit, IKN dan H Ramelan. 2002. Anatomi Kayu. Bogor: Yayasan Penerbit Fakultas Kehutanan.6. Somayaji, Shan. 2001. Civil Engineering materials.. New Jersey: Prentice Hall.7. Technical teacher Training Institute. 1992. Civil Engineering materials. New delhi: Tata McGraw-Hill Company Limited8. Thimoshenko,SP dan JN Goodier.1994. Teori elastisitas. Penerjemah : Darwin Sebayang. Jakarta: Erlangga
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	50050032
Subtitle, if applicable	-
Course, if applicable	Basic Physics Practice
Semester(s) in which the module is taught	Even
Person responsible for the module	Lecturer of the course
Lecturer	M. Agphin Ramadhan, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 2 nd semester to relate basic sciences that are general and pedagogical with real life.
Type of teaching, contact hours	Teaching methods used in this course are Student Active Learning Contact hours for lecture is 23 hours
Workload	For this course, students required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	1 credit points (equivalent with 1.5 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards Intended Learning Outcomes Special Competence (SC3): Able to practice jobs in the field of building engineering education

	<p>using hardware</p> <p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to analyze basic physics theory applied on experiments at the laboratory • Able to practice experiments regarding to certain basic physics concept
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Content	<p>Students will learn about: Application of physics concepts in civil engineering, especially building mechanics and physics</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Attend virtual face-to-face lectures should be at least 80% of the ideal number of meetings (see university academics rules). - Every student must be active and participative in lectures. - Attend online classes on time according to the time set/agreed. - The delay tolerance is 30 minutes. If it passes the tolerance time limit then the person concerned can still attend the lecture but is not recorded as a present - Every student must be active and participative in lectures. - Respect each other and don't make noise/disruption/damage in online classes - Wear neat and polite clothes during lectures, and according to the rules, - There will be a notification if you are not present in the face-to-face lecture. - During the teleconference, the microphone is muted unless requested permission to speak - Asking permission (by raising your hand) if you want to talk, ask, or answer - Respect each other and don't make noise/disruption/damage in class. - There should be no plagiarism and other forms of violation of norms. <p>Form of examination: Written exam: Essay</p>
Media employed	<p>Direct Whiteboard and Power Point Presentation.</p>

Reading list	<ol style="list-style-type: none"> 1. Megson. 2014. Structural and Stress Analysis, 3rd Ed., Elsevier, Waltham USA. 2. Hibbeler, R.C. 2014. Statics and Mechanics of Materials, 4th Ed., Pearson Prentice Hall, NYUSA. 3. Young, D.F., Munson, B.R., Okiishi, T.H., Huebsch, W.W., 2011, A Brief Introduction to Fluid Mechanics, 5th Edition, J.Wiley & Sons, Inc., NJ. 4. White, Frank M. 2011. Fluid Mechanics, 7th Edition, The McGraw-Hill Book Co., New York. 5. Jim Breithaupt. 2000. New Understanding Physics. For Advanced Level. Fourth Edition. U.K: Stanley Thornes Publishers. Ltd. 6. Loo Kwok Wai. 2006. Longman Advanced Level Physics. Singapore: Pearson Education South Asia Pte. Ltd. 7. Mikrajuddin Abdullah. 2016. Fisika Dasar I. Bandung: ITB
Date of last amendment made	9 January 2017

Semester 3

List of Courses:

- 01** Citizenship Education
- 02** Basic Socio - Cultural Science
- 03** Educators and Education Professionals
- 04** Engineering Mechanics III
- 05** Steel Structure I
- 06** Wood Structure I
- 07** Concrete Structure I
- 08** Soil Mechanics
- 09** Practice Material Testing
- 10** Occupational Health and Safety
- 11** English

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00051062
Subtitle, if applicable	-
Course, if applicable	Citizenship Education
Semester(s) in which the module is taught	Odd
Person responsible for the module	Lecturer of the course
Lecturer	University Team
Language	Indonesia Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 3 rd semester
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., group investigation, small group discussion, case study, and video-based learning) - Structured assignments (i.e., essays and case study) <p>Class size of lecture is 30 students. This course meets 27 contact hours for lecture and 32 hours for assignments.</p>
Workload	<p>For this course, students required to meet a minimum of 91 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 27 hours for lecture, - 32 hours for structured assignments, - 32 hours for individual study
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 3: Able to demonstrate an attitude as a professional, ethical educators, nationalist, and pious</p> <p>Intended Learning Outcomes</p> <p>Attitude (A1): Able to collaborate with teams by applying professional oral and written communication</p> <p>Attitude (A2): Able to demonstrate an attitude as a thoroughly professional, ethical, nationalist, and pious educator</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to analyze and provide arguments for Indonesia's national integration • Able to analyze and provide arguments based on <i>Pancasila</i> • Able to analyze and give arguments for national security and defend the country
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<p>Content</p>	<p>Students will learn about:</p> <p>This course serves as a source of value in society, personality development to become a complete Indonesian human, establishes a consistent personality in realizing the basic values of society, nation and state, fosters a sense of nationality and love for the homeland throughout life in mastering and implementing and developing science and technology and his art with a sense of responsibility. The basic competencies of citizenship education courses are so that students become professional scientists, have a sense of nationality and love for the homeland, civilized democracy, become citizens who have high competitiveness, discipline, and actively participate in building a peaceful life based on the <i>Pancasila</i> value system.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade.

	Form of examination: Written exam: Essay
Media employed	Book, Power Point Presentation, and video.
Reading list	<ol style="list-style-type: none"> 1. A Ubaidillah Dkk, Pendidikan Kewarganegaraan: Demokrasi, HAM, dan Masyarakat Madani, IAIN Jakarta Press, Jakarta, 2000. 2. Hotma P. Sibuea, Asas Negara Hukum, Peraturan Kebijakan, dan Asas-Asas Umum Pemerintahan yang Baik, TTP, PT Penerbit Erlangga, 2010. 3. Hendra Nurtjahyo, Filsafat Demokrasi, PT Bumi Aksara, Jakarta, 2008.
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00051262
Subtitle, if applicable	-
Course, if applicable	Basic Socio – Cultural Science
Semester(s) in which the module is taught	Odd or Even
Person responsible for the module	Lecturer of the course
Lecturer	University Team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in both odd and even semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., group investigation, small group discussion, case study, and video-based learning) - Structured assignments (i.e., essays and case study) <p>Class of lecture is 30 students. This course meets 27 contact hours for lecture and 28 hours for assignments.</p>
Workload	<p>For this course, students required to meet a minimum of 91 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 27 hours for lecture, - 32 hours for structured assignments, - 32 hours for individual study
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 3: Able to demonstrate an attitude as a professional, ethical educator, nationalist, and pious</p> <p>Intended Learning Outcomes</p> <p>Attitude (A1): Able to collaborate with teams by applying professional oral and written communication</p> <p>Attitude (A2): Able to demonstrate an attitude as a thoroughly professional, ethical, nationalist, and pious educator</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the concept of humans as individual and social beings, as well as the concept of culture • Able to apply the principles of diversity, equality, values, norms, laws, science and technology concepts • Able to explain the concept of civilization and environment
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<p>Content</p>	<p>Students will learn about:</p> <p>Provide a broad foundation and insight, cultivate a critical, sensitive, and wise attitude in understanding various social and cultural environmental phenomena, respecting and appreciating the plurality and equality of human degrees in social life as civilized, sensitive and responsible individual and social beings. Management of human resources and the natural environment.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Book, Power Point Presentation, Video</p>
<p>Reading list</p>	<ol style="list-style-type: none"> 1. Tim Dosen UNJ, 2015. Ilmu Sosial Budaya Dasar, Jakarta: MKU. 2. Abdulkadir Muhammad, Ilmu Sosial Budaya Dasar, Bandung,

	<p>PT. Citra Aditya Bakti, 2008</p> <ol style="list-style-type: none"> 3. Elly, M Setiadi, Ilmu Sosial Budaya Dasar, Jakarta: Kencana, 2006 4. Herimanto dkk, Ilmu Sosial Budaya Dasar, Jakarta: Bumi Aksara 2009 5. Rusmin Tumanggor dkk , Ilmu Sosial Dasar, Jakarta, Kencana, 2010 6. Soerjono Soekanto, Sosiologi Suatu Pengantar, Jakarta: Paradigma, 2008 7. W.A Gerungan, Psikologi Sosial, Bandung: PT Refika Aditama, 2004 8. Yesmil Anwar, Adang, Kriminologi, bandung, PT Refika Aditama 2010 9. Gie, The Liang. 1996. Pengantar Filsafat Teknologi.Penerbit ANDI. Yogyakarta.
Date of last amendment made	9 January 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00052312
Subtitle, if applicable	-
Course, if applicable	Educators and Education Professionals
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	MKDK course team
Lecturer	MKDK course team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the third semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., assignment, case-based learning, project-based learning). - Structured assignments (i.e., essays, case study, problem-based learning) - Practice (i.e., case study regarding the results of studies and problem analysis of educators and education personnel in Indonesia) <p>Class size of lecture is 40 students.</p> <p>This course meets 26.67 hours lectures, 32 hours for assignments, and 32 hours for individual study.</p>
Workload	<p>Students are required to meet a minimum of 90.67 hours in one semester, which consists of:</p> <ul style="list-style-type: none"> - 26.67 hours for lectures, - 32 hours for structured assignments, - 32 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.

Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Module objectives/intended learning outcomes	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes</p> <p>PLO 1: Able to apply pedagogical discipline, namely by planning, implementing, and evaluating learning programs in building engineering education.</p> <p>Intended Learning Outcomes</p> <p>Knowledge (K1): Able to apply learning and learning theory according to the age development of vocational students based on Indonesia education foundation.</p> <p>Knowledge (K2): Able to carry out the planning, implementation, and evaluation of learning at the SMK Building Engineering by the management of vocational education.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate qualification and competency standards for educators (especially teacher and lecturers). • Able to elaborate professional code of ethics and professional organization of education personnel. • Able to compile field reports on the process and results of the implementation of professional duties of educators and education staff.

Content	Students will learn about: Introduction and mastery of concepts and working mechanisms of the teaching profession and education staff.
Forms of Assessment	Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%
Study and examination requirements and forms of examination	Study and examination requirements: <ul style="list-style-type: none"> - Students are not allowed to come late. Lateness tolerance is 10 minutes. When passing the late tolerance, students are not allowed to participate in examinations. - Students are required to notify the lecturer if they do not attend class due to illness, etc. - Students must submit all class assignments before the deadline. - Students must participate in the examinations to get final grade.

	Form of examination: Written exam: Essay
Media employed	PowerPoint Presentation, Internet
Reading list	<ol style="list-style-type: none"> 1. Hoyle and Megarry. A Code of Conduct for Success and Happiness in Your Professional Life TIPS FOR Graduates Revised Edition Susan Morem. New York : ferguson, 2010. 2. Beth Luey. A different kind of Profession. Canada:Univeristy of Toronto, 2008. 3. Dewey, John. (2002). Pengalaman Dan Pendidikan. Yogyakarta: Kepel Press. 4. E. Slavin, Robert. (2008). Psikologi Pendidikan, Teori dan Praktik, Jilid 1. Jakarta: Indeks. 5. _____. (2009). Psikologi Pendidikan, Teori dan Praktik, Jilid 2. Jakarta: Indeks. 6. Effendi, Muhadjir. (2004). Pedagogi Kemanusiaan. Malang: UMM Press. 7. Freire, Paulo. (2001). Pedagogi Hati. Yogyakarta: Kanisius. 8. Hamzah. (2007). Model Pembelajaran Menciptakan Proses Belajar Mengajar yang Kreatif dan Efektif. Jakarta: Bumi Aksara. 9. Hughes., Fergus P. (2010). Children, Play and Development. Calofornia: Sage Publication Inc. 10. Jensen, Eric. (2008). Brain-Based Learning (Pembelajaran Berbasis Otak), Cara Baru dalam Pengajaran dan Pelatihan. Yogyakarta: Pustaka Pelajar. 11. Sylvia Cruesss, R, dkk. Profession a working definition for medical educator. Canada:McGill University, 2003. 12. Katherine Cheshire and David Pligrim, A Short Introduction to Clinical Psychology, London: Sage Publication, 2004. 13. Andrew Walsh and Padma Inala, Active Learning Techniques for Librarian, UK: Chandos Publishing, 2010. 14. Katherine Cheshire and David Pligrim, A Short Introduction to Clinical Psychology, London: Sage Publication, 2004. 15. Rugaiyah, Profesi Kependidikan, Bogor: Ghalia Indonesia, 2012. 16. Werther dan Davis, Human Resources And Personnel Management, 2006 17. Edwin B. Flippo, Personnel Management 18. Abdurrahman. (2007). Meaningful Learning Re-invensi Kebermaknaan Pembelajaran. Yogyakarta: Pustaka Pelajar. 19. Fetherson., Tony. (2007) Becoming on Effective Teacher. Vuctoria: Nelson Australia Pty Limited.
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150192
Subtitle, if applicable	-
Course, if applicable	Engineering Mechanics 3
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	Lecturer of the course
Lecturer	Sittati Musalamah, MT and Ririt Aprilin S, M.Sc.Eng
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to solve problems related to building engineering is offered in the third semester.
Type of teaching, contact hours	The teaching methods used in this course are teacher centered learning, PBL, CBL. This course meets 23 hours for lecture, 28 for assignments, and 28 for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Engineering Mechanics 1, Engineering Mechanics 2

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes</p> <p>PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology.</p> <p>Intended Learning Outcomes</p> <p>Special Competence (SC1):</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education.</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education.</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to analyze indeterminate static structures using the Slope Deflection method on beam and portal structure models. • Able to analyze indeterminate static structures using the Cross (Moment Distribution) method on beam and portal structure models.
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Able to analyze indeterminate static structures using the Slope Deflection method on beam and portal structure models. - Able to analyze indeterminate static structures using the Cross (Moment Distribution) method on beam and portal structure models.
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who do not attend lectures more than 3 (three) times are considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Fail to submit assignments on time will be considered as not submitting. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a doctor's certificate or a certificate from their parents are not allowed to take the follow-up exam. - Students who do not submit their major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with the standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students should dress cleanly, neatly, and politely, and wear shoes. - Students should not use any communication tools for purposes that are not related to learning. - Students should not make any noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out with good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>

Reading list	<ol style="list-style-type: none">1. RC Hibbeler, <i>Structural Analysis</i>, 9th Edition, USA: John Wiley & Sons, 2014.2. Aslam Kassimali, <i>Structural Analysis</i>, 4th Edition, USA: Cengage Learning, 20113. Chu Kia Wang, <i>Analisa Struktur Lanjutan</i>, Jilid 1, Jakarta : Erlangga, 1994.4. Website Mathalino.com
Date of last amendment made	July 4 th 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150862
Subtitle, if applicable	-
Course, if applicable	Steel Structure 1
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	Lecturer of the course
Lecturer	Ririt Aprilin S, M.Sc.Eng
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to design building engineering based on existing materials is offered in the third semester.
Type of teaching, contact hours	Teaching method used in this course is Project-based Learning. The course meets 35 hours for lecture, 42 hours for assignments, 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Engineering Mechanics 1, Materials Mechanics
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology. Intended Learning Outcomes Special Competence (SC1):

	<p>Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process.</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education.</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education.</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate basic knowledge of steel materials and steel construction joints. • Able to design steel construction joints and tensile bars, and bending bars. • Able to design tensile and compressive bar designs knowledge in the design of certain static simple steel structures (roof trusses or 2-dimensional bridges).
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Able to explain basic knowledge of steel material. - Able to explain and design steel construction joints. - Able to design tensile members, compression members, and bending members. - Able to integrate design knowledge of tensile and compressive elements in the design of certain static simple steel structures (roof trusses or 2-dimensional bridges).
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Collection of cases, assignments and exams:</p> <ul style="list-style-type: none"> - On time and will not be checked if it is late to enter the system <p>Cheating:</p> <ul style="list-style-type: none"> - Students who cheat in exams will be given an E for the courses taken and must be repeated in the next semester. <p>Form of examination: Written exam: Essay</p>

Media employed	Computer / Laptop / Smartphone and Microsoft Teams
Reading list	<ol style="list-style-type: none"> 1. William T. Segui, <i>Steel Design</i>, 4th Edition, Canada : Cengage Learning, 2007 2. Duane Nickols, <i>Steel Beam Design by ASD/LRFD Steel Construction Manual</i>, 13th Edition. 3. Bambang Suryoatmono, <i>Analisis Komponen Struktur Baja dengan AISC – LRFD 2005 : Teori</i>, Universitas Parahyangan 4. Aslam Kassimali, <i>Structural Analysis</i>, 4th Edition, USA : Cengage Learning Inc., 2010 5. SK Duggal, <i>Design of Steel Structures</i>, 3rd Edition, New Delhi : Tata McGraw-Hill, 2009 6. Sarwar Alam Raz, <i>Structural Design in Steel</i>, New Delhi : New Age International, 2002 7. L.S. Negi, <i>Design of Steel Structures</i>, 2nd Edition, New Delhi : Tata McGraw-Hill, 1997 8. BC. Punmia, Ashok Kumar Jain, Arun Kumar Jain, <i>Comprehensive Design of Steel Structures</i>, New Delhi : Laxmi Publication (P) Ltd, 1998 9. Roger L. Brockenbrough, Frederick S. Merritt, <i>Steel Designer's Handbook</i>, 4th Edition, USA : McGraw-Hill, 2006 10. Anonym, <i>Instruction Manual for Installing High-Strength Bolts with Direct Tension Indicators (ASTM F959M)</i>, 6th Edition, Langhorne : TurnaSure LLC, 2004 11. Monther Dwaikat, <i>Design of Connections</i>, An-Najah National University : Department of Building Engineering 12. Agus Setiawan, <i>Perencanaan Struktur Baja dengan Metode LRFD</i>, Jakarta : Erlangga, 2008
Date of last amendment made	4 July 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150882
Subtitle, if applicable	-
Course, if applicable	Wood Structure 1
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	Lecturer of the course
Lecturer	M. Agphin Ramadhan, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to identify data in the problem-solving process in the field of building engineering is given in the third semester.
Type of teaching, contact hours	Teaching method used in this course is Student Active Learning. This course meets 23 contact hours for lecture, 28 for assignments, and 28 for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology. Intended Learning Outcomes Special Competence (SC1): Able to apply basic concepts of building design and construction by

	<p>utilizing the latest technology to support the learning process.</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education.</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance to the field of building engineering education.</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to connect the basic concepts of wood as a building material with real-life practice. • Able to design parts of building structures from wood with sizes, connections, and connectors that meet the safety factor.
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<p>Content</p>	<p>Students will learn about:</p> <p>The nature and type of wood quality, durability and strength of wood, allowable stresses for structural design, introduction of connectors and their use in various functions and sources of connection, Indonesian Timber Construction Regulations, tensile, compressive and flexural rods, understand the basic calculations of wood construction and connection based on PKKI 1961 and SNI 7973: 2013, as well as planning and calculating the need for wood frames.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Attend face-to-face lectures at least 80% of the ideal number of meetings (see university academic regulations). - Every student must be active and participative in lectures. - Be present in class on time according to the time specified/agreed. - Lateness tolerance is 10 minutes. If the tolerance time limit is exceeded, the person concerned can still attend the lecture but the attendance list is given an alpha value. - There will be a report if you are not present in the face-to-face lectures. - During lectures, the cell phone is turned off or silent. - Ask permission (by raising your hand) if you want to talk, ask questions, answer, leave the classroom or other needs. - Respect each other and don't make noise/disruption/damage in the classroom.

	<ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. - Wear neat and polite clothes during lectures and in accordance with the rules. <p>Form of examination: Written exam: Essay</p>
Media employed	Whiteboard and PowerPoint Presentation.
Reading list	<ol style="list-style-type: none"> 1. Awaludin, Ali dan Inggar S. Irawati, 2009. Konstruksi Kayu. Yogyakarta, Biro Penerbit Teknik Sipil Universitas Gadjah Mada. 2. Awaludin, Ali, 2005. Dasar-dasar Perencanaan Sambungan Kayu. Yogyakarta, Biro Penerbit Teknik Sipil Universitas Gadjah Mada. 3. Badan Standardisasi Nasional, 2002. Tata Cara Perencanaan Konstruksi Kayu Indonesia (RSNI3). Jakarta: BSN 4. Badan Standardisasi Nasional, 2013. SNI 7973: 2013 Spesifikasi Desain untuk Konstruksi Kayu. Jakarta: BSN. 5. Beyer, Donald E; Keneth J. Fridley, Kelly E. Cobeen, David G. Pollock. 2007. Design of Wood Structure, ASD/LRFD. New York, Mc Graw Hill 6. Bodig, Jozsef and Benyamin A. Jayne. 1982. Mechanics of Wood and Wood Composites. New York : Van Nostrand Reinhold Company 7. Faherty, Keith F. and Thomas Williamson, 1999. Wood Engineering and Construction Handbook. New York : McGraw Hill Inc. 8. Forest Products Laboratory. 1999. Wood Handbook, Wood as an Engineerig material. United States : Forest Products society 9. Pusat Studi Konstruksi Kayu, 2003. Prosiding Seminar Nasional “Pemberdayaan Kayu Konstruksi” . Jakarta, 12 Agustus 2003; Fakultas Teknik Sipil dan Perencanaan, Universitas Trisakti. 10. Pwee Hong, Tjoa dan FH Djokowahyono. 1996, Konstusi kayu. Yogyakarta, Penerbit Universitas Atmadjaja 11. Sadji. 1996. Konstruksi Kayu (Buku Pegangan Kuliah). Surabaya : Jurusan Teknik Sipil, Institut Teknologi Sepuluh November 12. Wiryomartono, Suwarno. 1977. Konstruksi Kayu. Yogyakarta : Fakultas Teknik, Universitas Gajah Mada 13. Yap, KH Felix. 1964. Konstruksi kayu. Jakarta, Penerbit Dhiwantara 14. Yayasan Dana Normalisasi Indonesia, 1989. Peraturan Konstruksi Kayu Indonesia NI-5 (PKKI 1961). Jakarta, Departemen Pekerjaan Umum, Direktorat Jenderal Cipta karya.

Date of last amendment made	July 4 th 2016
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Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	1503600010
Subtitle, if applicable	-
Course, if applicable	Concrete Structure 1
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	Lecturer of the course
Lecturer	Dra. Daryati, M.T
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course that is able to solve problems related to building engineering is offered in the third semester.
Type of teaching, contact hours	The teaching methods used in this course are the lecture methods which is enriched by the provision of structured assignments. This course meets 23 contact hours for lecture, 28 hours for assignments, and 28 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lectures; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Engineering Mechanics 1
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology. Intended Learning Outcomes

	<p>Special Competence (SC1): Able to apply basic concepts of building design and construction by utilizing the latest technology to support the learning process.</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education.</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate the basic concepts of reinforced concrete. • Able to apply the basic principles of beam structure analysis and planning with various methods. • Able to apply the basic principles of one-way and two-way slabs analysis and planning.
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Content	<p>Students will learn about:</p> <p>Basic concepts of planning and structural analysis of simple beams and T-beams, planning of shear reinforcement in beams, planning of one-way and two-way slabs and planning of short columns with axial loads.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations and assignments with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Attend face-to-face lectures at least 80% of the ideal number of meetings. - Be present in class on time according to the time specified/agreed. - Students must inform the lecturer if they do not attend the class due to sickness, etc. - Lateness tolerance is 10 minutes. If the tolerance time limit is exceeded, the student is considered absent. - Students who do not take the exam or do not submit assignments without notice will be awarded a D on the exam/assignment. - There should be no plagiarism and other forms of violation of norms. - During lectures, the cell phone is turned off or silent. - Ask permission (by raising your hand) if you want to talk, ask questions, answer, leave the classroom or other purposes. - Respect each other and don't make noise/disruption/damage in the

	<p>classroom.</p> <ul style="list-style-type: none"> - Wear neat and polite clothes during lectures and in accordance with the rules. - Students are not allowed to wear clothes that show their genitals (tight/transparent). - Students are asked to present their identity in the form of writing, pictures, or videos. <p>Form of examination: Written exam: Essay</p>
Media employed	Computer/Laptop, Google Classroom
Reading list	<ol style="list-style-type: none"> 1. 1. Agus Setiawan, “Perancangan Struktur Beton Bertulang “ Berdasarkan SNI 03-2847 :2013, Erlangga,2016. 2. Dipohusodo, istimewa., “Struktur Beton Bertulang”, Jakarta : Gramedia, 1996. 3. Wahyudi, L., Rahim, Syahril A., “Struktur Beton Bertulang”, Jakarta : Gramedia, 1999. 4. SNI 03-2847-2002 Tata Cara Perhitungan Struktur Beton Untuk Bangunan Gedung, 5. SNI-2847-2013 Persyaratan Beton Struktural untuk bangunan gedung.
Date of last amendment	July 4 th 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-074-2
Subtitle, if applicable	-
Course, if applicable	Soil Mechanics
Semester(s) in which the module is taught	III
Person responsible for the module	Lecturer of Courses
Lecturer	Dr. Santoso Sri Handoyo, MT.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to combine scientific concepts in the field of building construction is offered in the 2 nd semester.
Type of teaching, contact hours	Teaching method used in this course is Case-Based Learning. The course meets 23 hours for lecture, 28 hours for assignments, 28 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Basic mathematics, physics
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education. Intended Learning Outcomes

	<p>General Competence (GC1): Able to apply basic knowledge of mathematics and physics in engineering mechanics concepts to support the learning process.</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physical and its impact on the environment, to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain soil characteristics. • Able to apply soil characteristic conditions in the planning (foundation) of building cultures.
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<p>Content</p>	<p>Students will learn about: Soil Concepts and Soil Characteristics; Land Properties; Soil Compaction; Soil Permeability; Pressure on the Ground; Pressure Distribution in Ground; Soil Shear Strength; Lateral Earth Pressure; Land Consolidation and Subsidence; Slope Stability; Soil Bearing Capacity.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Attendance in face-to-face classes at least 80% of the ideal number of meetings (see university academic regulations). - Be present in class on time according to the time specified/agreed. - Students must inform the lecturer if they do not attend the class due to illness, etc. <p>Lateness:</p> <ul style="list-style-type: none"> - Lateness tolerance is 10 minutes. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the exams or do not submit assignments without informing the lecturer will be given a D on the exam/assignment. <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms.

	<p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Wear polite and neat clothes (shirts) and are not allowed to wear T-shirts. - Students do not use communication tools for purposes that are not related to learning. - Ask permission (by raising hand) if student want to talk, ask questions, answer, leave the classroom or other purposes. - Every student must be active and participative in the classroom. - During the class, the cellphone is turned off or silent. - Respect each other and do not make noise, disturbance or damage in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Wear clothes (shirts) that are polite and neat and are not allowed to wear T-shirts and are recommended to be in a conducive place. - Students are asked to present their identity in the form of writing, pictures, or videos. - Every student must be active and participative in class while still paying attention to ethics and order in online classes. - During class, the cellphone is turned off or silent. - Ask for permission (by activating the raise hand or raise voice feature) if students want to talk, ask questions, answer, leave the classroom or other needs. - Orderly and does not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. Bowles, J.E. <i>Foundation Analisis and Design</i>. Tokyo: McGraw-Hill Kogakusha, Ltd., 1997. 2. Bowles, J.E. <i>Physical and Geotechnical Properties of Soils</i>. USA: McGraw-Hill Book Company, 1994. 3. Budi, Gogot Setyo. <i>Pengujian Tanah di Laboratorium, Penjelasan dan Panduan</i>. Yogyakarta: Graha Ilmu, 2011. 4. Das, Braja M. <i>Principles of Geotechnical Engineering</i>. London: PWS Publisher, 1995. 5. Hardiyatmo, Hary Christady. <i>Mekanika Tanah I</i>, Edisi ke Enam. Yogyakarta: Gajah Mada University Press, 2012. 6. Lambe, T.W. dan R.V. Whitman. <i>Soil Mechanics</i>. New York: John Wiley and Son Inc., 1989.

	<p>7. Mochtar, Noor Endah dan Indrasurya B. Mochtar. <i>Mekanika Tanah (Prinsip-prinsip Rekayasa Geoteknis)</i>, Jilid I, terjemahan dari buku: <i>Principles of Geotechnical Engineering</i>. Jakarta: Erlangga, 2002.</p> <p>8. Noor, Djauhari. <i>Prinsip-prinsip Stratigrafi</i>. Depok: Khalifah Mediatama, 2014.</p> <p>9. Surendro, Bambang. <i>Mekanika Tanah, Teori, Soal dan Penyelesaian</i>. Yogyakarta: Andi Offset, Yogyakarta, 2014.</p> <p>10. Sutarman, E. <i>Konsep dan Apikasi Mekanika Tanah</i>. Yogyakarta: Andi Offset, Yogyakarta, 2013.</p>
Date of last amendment	July 4 th 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151272
Subtitle, if applicable	-
Course, if applicable	Practice Material Testing
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	Lecturer of the course
Lecturer	Kusno Adi Sambowo, ST.,Ph.D and Anisah, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to apply building engineering practice, both at the planning, implementation, and evaluation stages is offered in the third semester.
Type of teaching, contact hours	The teaching method used in this course is Case-based Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Concrete Technology, Building Materials Science

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying established standards.</p> <p>Intended Learning Outcomes Special Competence (SC3): Able to practice work in the field of building engineering education using hardware. Special Competence (SC4): Able to operate software which related to job analysis in the field of building engineering education.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to test the quality of cement materials. • Able to test the quality of fine aggregate and coarse aggregate. • Able to perform concrete quality testing.
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Able to test the quality of cement materials - Able to test the Quality of Fine Aggregate Materials - Able to test the Quality of Coarse Aggregate Materials - Able to perform Concrete Quality testing
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%.</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who do not attend, whether with notification or not, more than 20% of the total meeting are considered not to pass and get an E. <p>Lateness:</p> <ul style="list-style-type: none"> - A few minutes late to class is allowed to attend the lecture only if it starts at 8 o'clock. - Being late for more than 1-15 minutes will not permitted to attend the lecture, if the lectures start at 9 onwards. - Delay in sending assignments for 1-7 days from the specified deadline will result in a deduction of 20 points from a total of 1-100 points. - Late submission of assignments more than 7 days from the

	<p>specified deadline will get a score of 0.</p> <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the exam or submit the assignments without informing the lecturer will be awarded a D on the exams/assignments. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students must comply with the standard rules and policies regarding academics and avoid plagiarism and cheating in exams. Acts of plagiarism and fraud in the exam will be awarded an E score on the exam. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear clothes that show their genitals (tight/transparent) and wear sandals. - Students are required to wear Lab Coats and shoes. - Students should not use any communication tools for purposes that are not related to learning. - Students should not make any noise that disturbs the order of learning. <p>Form of examination: Written exam: Essay</p>
Media employed	Lab equipment and Google Classroom.
Reading list	1. Modul Ajar Praktikum Uji Bahan
Date of last amendment made	July 4 th 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150532
Subtitle, if applicable	-
Course, if applicable	Occupational Health and Safety
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	Lecturer of the course
Lecturer	Anisah, MT and R. Eka Murtinugraha, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to investigate the construction process based on applicable rules and construction management concepts is offered in the third semester.
Type of teaching, contact hours	The teaching method used in this course is Student Active Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology.</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply basic concepts of building design and construction by utilizing the latest technology to support the learning process. Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education. Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education. Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the basic principles of OHS. • Able to interpret the concepts of OHS building construction work. • Able to interpret the concept of OHS supporting the construction work and OHS management risk.
<p>Content</p>	<p>Students will learn about:</p> <p>Able to understand the basic principles of OHS. Able to master the concept of building construction work OHS. Able to master the concept of OHS supporting construction work and OHS management risk.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%.</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not attend lectures more than 3 times are considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in the classroom no later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the classroom to attend the lectures but are not included in the attendance. - Students who arrive more than 30 minutes late are not allowed to attend the lectures. - Assignments are submitted on time as agreed. Failure to submit the assignments on time will be considered as not submitting. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a doctor's certificate or a certificate from their parents are not be allowed to take the follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, politely, and wear shoes. - Students are asked to not use any communication tools for purposes that are not related to learning. - Students must not make any noise that disturbs the order of learning. - Questions and answers that take place during lecturers must be carried out in good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>
<p>Reading list</p>	<ol style="list-style-type: none"> 1. Reese, Charles D. 2004. <i>Office Building Safety and Health</i>. Washington DC: CRC Press. 2. Glismann, Peter J. 2013. <i>Systems Engineering and Safety: Building The Bridge</i>. Boca Raton: CRC Press.

	<ol style="list-style-type: none"> 3. Ridley, John. 2008. <i>Ikhtisar Kesehatan dan Keselamatan Kerja</i>. Jakarta: Erlangga. 4. Boedi Rijanto. 2010. <i>Pedoman Praktis Keselematan, Kesehatan Kerja dan Lingkungan (K3L) Industri Konstruksi</i>. Jakarta: Mitra Wacana Media. 5. Tarwaka. 2016. <i>Dasar-dasar Keselamatan Kerja Serta Pencegahan Kecelakaan di Tempat Kerja</i>. Surakarta: Harapan Press. 6. I Gede Widayana dan I Gede Wiratmaja. 2014. <i>Kesehatan dan Keselamatan Kerja</i>. Singaraja: Graha Ilmu. 7. Rudi Suardi. 2005. <i>Sistem Manajemen Keselamatan dan Kesehatan Kerja</i>. Jakarta: PPM 8. Paimin Napitupulu, dkk. 2014. <i>Evaluasi Sistem Proteksi Kebakaran Perusahaan</i>. Jakarta: PT. ALUMNI Bandung.
<p>Date of last amendment made</p>	<p>July 4th 2016</p>

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151612
Subtitle, if applicable	-
Course, if applicable	English
Semester(s) in which the module is taught	Third Semester
Person responsible for the module	Lecturer of Courses
Lecturer	Ririt Aprilin S, M.Sc.Eng and Kusno Adi Sambowo, Ph.D
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to connect basic sciences that are general and pedagogical with real life is offered in the third semester.
Type of teaching, contact hours	The teaching method used in this course is Case-based Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments, - 28 hours for individual study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education. Intended Learning Outcomes General Competence (GC1):

	<p>Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physical and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to use English as a communication tool in carrying out tasks in their field of expertise and to build networks in the global world. • Able to comply written reports related to building techniques using English.
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Content	<p>Students will learn about: Able to describe, communicate, and provide opinions related to the field of Civil Engineering in English both verbally and nonverbally.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements: Collection of cases, assignments, and exams:</p> <ul style="list-style-type: none"> - On time and will not be checked if you are late in the system. <p>Cheating:</p> <ul style="list-style-type: none"> - Students who cheat in the exams will be given with E for the courses taken and must be repeated in the following semester. <p>Form of examination: Written exam: Essay</p>
Media employed	<p>Computer / Laptop / Smartphone and Microsoft Teams</p>
Reading list	<ol style="list-style-type: none"> 1. Michael Alley, <i>The Craft of Scientific Presentations: Critical Steps to Succeed and Critical Errors to Avoid</i>, 9th Edition, USA: Springer-Verlag, 2003 2. Jen Tsi Yang, <i>An Outline of Scientific Writing</i>, 2nd Edition, USA: World Scientific Publishing, 1999
Date of last amendment made	<p>July 4th 2016</p>

Semester 4

List of Courses:

- 01** Economics of Planning Engineering
- 02** Lesson Planning
- 03** Learning and Learning Theory
- 04** Steel Structure II
- 05** Wood Structure II
- 06** Concrete Structure II
- 07** Soil Mechanics Practice
- 08** Structure Analysis Program
- 09** Mechanical Soil Transfer / Highway
- 10** Theory and Practice Land Measurement I

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151022
Subtitle, if applicable	-
Course, if applicable	Economic of Planning Engineering
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Anisah, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to identify data in the problem-solving process in the field of building engineering is offered in the fourth semester.
Type of teaching, contact hours	The teaching methods used in this course is Student Active Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to the planning based on the latest science and technology.</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process. Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education. Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education. Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the concept of technical economic theory. • Able to determine alternatives in making decisions related to investment activities and asset impairment in the civil engineering construction industry.
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<p>Content</p>	<p>Students will learn about: Able to understand the concept of technical economic theory. Able to determine alternatives in making decisions related to investment activities and asset impairment in the Civil Engineering construction industry.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%.</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements: Attendance: - Students who are not present at the lecture more than 3 times, it is considered to have resigned.</p> <p>Lateness: - Students must be in class no later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to</p>

	<p>enter the class to attend lectures, but are not included in the attendance.</p> <ul style="list-style-type: none"> - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Fail to submit assignments on time will be considered as not submitting. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes. - Students should not use any communication tools for purposes that are not related to learning. - Students should not make any noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD / Projector
Reading list	<ol style="list-style-type: none"> 1. Blank & Tarquin 1999, Engineering Economy, 5th edition Mc Graw Hill. 2. Donald G newnan, 1990 Engineering Economic Analysis, 3rd edition, Engineering Press Inc. California. 3. E. Paul De Garmo, William G. Sullivan, James A. Bontadelli, Elin M.Wicks, 1997 Engineering Economy, 10th edition, Prentice Hall Int. 4. Lenggogeni, Anisah, 2016, Buku Ajar Ekonomi Teknik
Date of last amendment made	January 9 th 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	50050092
Subtitle, if applicable	-
Course, if applicable	Lesson Planning
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Tuti Iriani, M.Si
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to design learning supported by research technology is offered in the fourth semester.
Type of teaching, contact hours	Teaching method used in this course is: - Student Center Learning This course meets 23 hours for lecture, 28 hours for assignments, and 28 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 1: Able to apply the discipline of pedagogy, namely by planning, implementing, and evaluating learning program in building engineering education.

	<p>Intended Learning Outcomes</p> <p>Knowledge (K1): Able to apply learning and learning theory according to the age development of vocational students based on the foundation of Indonesian education.</p> <p>Knowledge (K2): Able to carry out planning, implementation, and evaluation of learning in the SMK Building Engineering by the vocational education management.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain learning planning in high school (SMK). • Able to explain the theory of vocational education curriculum. • Able to design learning program plans in accordance with the applicable vocational curriculum.
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<p>Content</p>	<p>Students will learn about: 21st Century Learning Concept; The 2013 Revised 2018 Curriculum Covers Core Competencies and Basic Competencies; Syllabus Development; Preparation of Indicators and Learning Objectives, Cognitive, Affective and Psychomotor Areas; Learning Strategies, Media, Models, Methods and Learning Materials; and Preparation of Learning Implementation Plans (RPP) Applied in the Vocational Field, Especially Building Engineering.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Mid-Test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students attend face-to-face classes at least 80% of the ideal number of meetings. Every student must be active and participative in class. - Students must inform the lecturer if they do not attend the class due to sickness, etc. <p>Lateness:</p> <ul style="list-style-type: none"> - Lecturer and students arrive in class on time with 15 minutes of lateness tolerance. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Assignments are submitted in accordance with the agreement between the lecturer and students. Late is not accepted. - Mid Test and Final Test must be followed according to the agreed schedule. <p>Academic fraud:</p>

	<ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. - If plagiarism is found with fellow friends, the value is 0. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - During class, cellphone is turned off or silent. - Ask permission (by raising hand) if students want to talk, ask questions, answer, leave class or other purposes. - Respect each other and don't make noise/disruption/damage in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Online classes attended by students have been registered in the KRS. - It is required to do online classes via zoom/ WhatsApp group/ google classroom during the class process. - Must log in according to the schedule determined by the Faculty/Head of Study Programs/Lecturer. - Must follow the online learning process and be ready in front of the camera if the lecturer instructs and follows the class well. - During zoom lessons, students must be in front of the camera. - Mandatory Filling attendance at schoology for every meeting. - Must take the quiz via Quizziz. - Students are required to dress neatly and pay attention to the ethics and aesthetics of the room at the time of the meeting. - If student want to ask the lecturer, students can provide a code or text message to the lecturer. <p>Form of examination: Written exam</p>
Media employed	LCD Projector
Reading list	<ol style="list-style-type: none"> 1. Amri, Sofan. <i>Pengembangan & Model Pembelajaran dalam Kurikulum 2013</i>. Jakarta: Prestasi Putrakarya, 2013. 2. Hayati, Mimin. <i>Model dan Teknik Penilaian pada Satuan Pendidikan</i>. Jakarta: GP Press, 2007. 3. Iriani, Tuti dan Agphin Ramadhan. <i>Perencanaan Pembelajaran untuk Kejuruan</i>. Prenada Media Group, 2019. 4. Kementrian Pendidikan dan Kebudayaan. <i>Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Kejuruan/Madrasah Aliyah Kejuruan</i>. Jakarta, 2013.

	<p>5. Majid, Abdul. <i>Perencanaan Pembelajaran: Mengembangkan Standar Kompetensi Guru</i>. Bandung: PT. Remaja Rosdakarya, 2006.</p> <p>6. Prawiradilaga, Dewi Salma dan Eveline Siregar. <i>Mozaik Teknologi Pendidikan</i>. Prenada Media Group, 2008.</p> <p>7. Trilling, Bernie and Charles Fadel. <i>21st Century Skills: Learning for Life in Our Times</i>. John Wiley & Sons, 2009.</p>
Date of last amendment made	January 9 th 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	00052144
Subtitle, if applicable	-
Course, if applicable	Learning and Learning Theory
Semester(s) in which the module is taught	4
Person responsible for the module	MKDK course team
Lecturer	MKDK course team
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course is offered in the 5th semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Lecture (i.e., self-directed learning, small group discussion, collaborative learning, cooperative learning, cooperative learning, simulation/demonstration, project-based learning, cased-based learning). - Structured assignments (i.e., essays, project-based learning, cased-based learning) - Practice (i.e., project-based learning in the form of Critical Journal Report case studies through field observations at schools). <p>Class size of lecture is 40 students.</p> <p>This course meets 70 hours for lecture and 84 hours for assignments.</p>
Workload	<p>Students are required to meet a minimum of 181.34 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 53.34 hours for lecture; - 64 hours for structured assignments; - 64 hours for individual study.
Credit points	4 credit points (equivalent with 6 ECTS)

Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Module objectives/intended learning outcomes	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes</p> <p>PLO 1:</p> <p>Able to apply pedagogical discipline, namely by planning, implementing, dan evaluating learning programs in building engineering education.</p> <p>Intended Learning Outcomes</p> <p>Knowledge (K1):</p> <p>Able to apply learning and learning theory according to the age development of vocational students based on Indonesian education foundation.</p> <p>Knowledge (K2):</p> <p>Able to implement the planning, implementation, and evaluation of learning in the SMK Building Engineering by the management of vocational education.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to understand the concepts and principles of learning and leaning as well as motivation in learning, including various schools of psychology and their application in the curriculum. • Able to structure learning by establishing an innovative approach. • Able to apply concepts and procedures for evaluating learning and learning outcomes.

Content	<p>Students will learn about:</p> <p>The basic concepts of learning and learning, learning principles and learning theories (behavioristic, cognitive, humanistic, constructivist).</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must not be late. The lateness tolerance is 10 minutes. When passing the late tolerance, students are not allowed to participate in the examination. - Students must inform the lecturer if they will not attend the class

	<p>due to sickness, etc.</p> <ul style="list-style-type: none"> - Students must submit all class assignments before the deadline. - Students must participate in the examinations to get final grade. <p>Form of examination: Written exam: multiple choice</p>
Media employed	LMS: onlinelearning.unj.ac.id, Power Point Presentation, Video
Reading list	<ol style="list-style-type: none"> 1. Tim Penyusun. 2016. Bahasa Indonesia untuk Perguruan Amstrong, <i>Sekolah Para Juara: Menerapkan Multiple Intelegences di Dunia Pendidikan</i>, Bandung: Penerbit Kaifa, 2003. 2. Anderson & Krathwohl, <i>A Taxonomy for Learning, Teaching and Assessing</i>, USA: Addison WesleTeachery Longman, Inc, 2001 3. Arikunto, Suharsimi, <i>Dasar-dasar Evaluasi Pendidikan</i>, Jakarta: Bumi Aksara, 1993. 4. Ashburn, Elizabeth A & Floden, Robert E., <i>Meaningful Learning Using Technology</i>, Teacher College Press, 2006 5. DePorter, Bobbi, <i>Quantum Teaching: Mempraktikkan Quantum Learning di Ruang-ruang Kelas</i>, Bandung: Penerbit Kaifa,2003 6. Dick & Carey, <i>The Systematic Design of Instruction</i>, Pearson, 2015 7. Djiwandono, Sri Esti Wuryani, <i>Psikologi Pendidikan</i>, Penerbit: PT.Gramedia Widiasarana Indonesia, 2002 8. Kilbane, Clare L & Milman, Natalie B, <i>Teaching Models</i>, Pearson, 2014 9. Mulyasa, <i>Kurikulum Berbasis Kompetensi: Konsep, Karakteristik dan Implementasi</i>, Bandung: PT.Remaja Rosdakarya, 2004 10. Paul Suparno, <i>Teori Intelegensi Ganda</i>, Yogyakarta: Penerbit Kanisius, 2004 11. Paulina Pannen dkk., <i>Konstruktivisme dalam Pembelajaran</i>, Jakarta: PAU-PPAI Dirjen Dikti Depdikbud, 2001 12. Sardiman, AM. 2012. <i>Interaksi dan Motivasi Belajar Mengajar</i>. Jakarta: Rajawali Press. 13. Schunk, Dale.H, <i>Learning Theories, an educational perspective</i>, pearson, 2012. 14. Siregar Eveline & Hartini Nara, <i>Teori Belajar dan pembelajaran</i>, Jakarta: Ghalia Indonesia, 2010 15. Smaldino dkk, <i>Instructional Technology and Media for Learning</i>, Eleventh edition, 2015 16. Suparman, Atwi, <i>Desain Instruksional</i>, Jakarta: PAU-PPAI Dirjen Dikti Depdikbud, 2001 17. Suprihatiningrum, J. 2013. <i>Strategi Pembelajaran</i>. Yogyakarta: Ar Ruz Media.

	<p>18. Suyono dan Hariyanto. 2015. Belajar dan Pembelajaran. Bandung: Remaja Rosdakarya.</p> <p>19. Thobroni, M & Mustofa, A. 2012. Belajar dan Pembelajaran. Yogyakarta: Ar Ruz Media.</p> <p>20. Yuliani Nurani dkk, <i>Strategi Pembelajaran: Materi Pokok Akta 8820</i>, Jakarta: Universitas Terbuka, 2003.</p> <p>21. Zainul, Asmawi, <i>Alternative Assesment</i>, Jakarta: PAU-PPAI Dirjen Dikti Depdiknas, 2001.</p>
Date of last amendment made	January 9 th 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineerin Education
Code, if applicable	54150872
Subtitle, if applicable	-
Course, if applicable	Steel Structure 2
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Ririt Aprilin S, M.Sc.Eng
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to design building engineering based on existing materials is offered in the fourth semester.
Type of teaching, contact hours	Teaching method used in this course is Project-based Learning. This course meets 53 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Steel Structure 1, Engineering Mechanics 2
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology. Intended Learning Outcomes Special Competence (SC1):

	<p>Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process.</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education.</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education.</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Designing beam-column steel. • Designing column-beam joints. • Designing composite beams and shear joints.
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Content	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Steel beam-column design - Designing beam-column joints - Designing composite beams and shear joints
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <p>Collection of cases, assignments and exams:</p> <ul style="list-style-type: none"> - On time and will not be checked if you are late in the system <p>Cheating:</p> <ul style="list-style-type: none"> - Students who cheat in exams will be given an E for the courses taken and must be repeated in the following semester. <p>Form of examination: Written exam: Essay</p>
Media employed	Computer / Laptop / Smartphone and Microsoft Teams
Reading list	<ol style="list-style-type: none"> 1. Agus Setiawan, <i>Perencanaan Struktur Baja dengan Metode LRFD</i>, Jakarta: Erlangga, 2008. 2. William T Segui, <i>Steel Design</i>, 4th Edition, Canada: Thomson, 2007
Date of last amendment made	January 9 th 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150882
Subtitle, if applicable	-
Course, if applicable	Wood Structure II
Semester(s) in which the module istaught	Fourth Semester
Person responsible for the module	Lecturer of Courses
Lecturer	M. Agphin Ramadhan, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to identify data in the problem-solving process in the field of building engineering is offered in the fourth semester.
Type of teaching, contact hours	Teaching method used in this course is Student Active Learning. This course meets 23 hours for lecture, 28 for assignments, and 28 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Wood Structure I and Engineering Mechanics II
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology. Intended Learning Outcomes Special Competence (SC1):

	<p>Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process.</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education.</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education.</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to design a wooden roof truss model. • Able to plan wooden bridge. • Able to elaborate artificial wood products and basic bamboo construction.
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Content	<p>Students will learn about: Plan and calculate the need for building roofs and various types of building structures in accordance with applicable regulations and standards in Indonesia as well as planning for use of wood as formwork in construction. This course material covers allowable stresses for structural design. The source is the Indonesian Timber Construction Regulation.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Attend face-to-face lectures at least 80% of the ideal number of meetings (see university academic regulations). - Every student must be active and participative in lectures. - Be present in class on time according to the time specified/agreed. - Lateness tolerance is 10 minutes. If the tolerance time limit is exceeded, the person concerned can still attend the lecture but the attendance list is given an alpha value. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - During lectures, the cellphone is turned off or silent. - Ask permission (by raising your hand) if you want to talk, ask questions, answer, leave the class or other purposes. - Respect each other and don't make noise/disruption/damage in the class.

	<ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. - Wear neat and polite clothes during lectures, and in accordance with the rules. <p>Form of examination: Written exam: Essay</p>
Media employed	Direct Whiteboard and PowerPoint Presentation.
Reading list	<ol style="list-style-type: none"> 1. Awaludin, Ali dan Inggar S. Irawati, 2009. Konstruksi Kayu. Yogyakarta, Biro Penerbit Teknik Sipil Universitas Gadjah Mada. 2. Awaludin, Ali, 2005. Dasar-dasar Perencanaan Sambungan Kayu. Yogyakarta, Biro Penerbit Teknik Sipil Universitas Gadjah Mada. 3. Badan Standardisasi Nasional, 2002. Tata Cara Perencanaan Konstruksi Kayu Indonesia (RSNI3). Jakarta: BSN 4. Badan Standardisasi Nasional, 2013. SNI 7973: 2013 Spesifikasi Desain untuk Konstruksi Kayu. Jakarta: BSN. 5. Beyer, Donald E; Keneth J. Fridley, Kelly E. Cobeen, David G. Pollock. 2007. Design of Wood Structure, ASD/LRFD. New York, Mc Grawn Hill 6. Bodig, Jozsef and Benyamin A. Jayne. 1982. Mechanics of Wood and Wood Composites. New York : Van Nostrand Reinhold Company 7. Faherty, Keith F. and Thomas Williamson, 1999. Wood Engineering and Construction Handbook. New York : McGrawn Hill Inc. 8. Forest Products Laboratory. 1999. Wood Handbook, Wood as an Engineerig material. United States : Forest Products society 9. Pusat Studi Konstruksi Kayu, 2003. Prosiding Seminar Nasional “Pemberdayaan Kayu Konstruksi” . Jakarta, 12 Agustus 2003; Fakultas Teknik Sipil dan Perencanaan, Universitas Trisakti. 10. Pwee Hong, Tjoa dan FH Djokowahyono. 1996, Konstusi kayu. Yogyakarta, Penerbit Universitas Atmadjaja 11. Sadji. 1996. Konstruksi Kayu (Buku Pegangan Kuliah). Surabaya : Jurusan Teknik Sipil, Institut Teknologi Sepuluh November 12. Wiryomartono, Suwarno. 1977. Konstruksi Kayu. Yogyakarta : Fakultas Teknik, Universitas Gajah Mada 13. Yap, KH Felix. 1964. Konstruksi kayu. Jakarta, Penerbit Dhiwantara 14. Yayasan Dana Normalisasi Indonesia, 1989. Peraturan Konstruksi Kayu Indonesia NI-5 (PKKI 1961). Jakarta, Departemen Pekerjaan Umum, Direktorat Jenderal Cipta karya.

Date of last amendment made	January 9 th 2017
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Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150842
Subtitle, if applicable	-
Course, if applicable	Concrete Structure 2
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Sittati Musalamah, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to design building engineering based on existing materials is offered in the fourth semester.
Type of teaching, contact hours	Teaching methods used in this course are teacher centered learning, PBL, and CBL. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Concrete Structure 1, Mechanical Engineering 3

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology.</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process. Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education. Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education. Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to design direct design methods on two-way slab planning. • Able to design continuous beam reinforcement plans in high-rise buildings. • Able to design column reinforcement plans in high-rise buildings.
<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Concept and application of direct design methods to two-way slab planning; - Concept and application of continuous beam reinforcement planning in high-rise buildings; - Concept and application of column reinforcement planning in high-rise buildings;
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who do not attend lectures more than 3 times are considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Not submitting assignments on time will be considered as fail to submit the assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a doctor's certificate or a certificate from their parents are not allowed to take the follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes. - Students should not use any communication tools for purposes that are not related to learning. - Students should not make any noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out with good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>

Reading list	<ol style="list-style-type: none">1. M. Nadim Hassoun, Akhtem Al-Manaseer; Structural Concrete Theory and Design, 6th ed. 2015.2. Jack C McCormac, Russel H Brown, Design of Reinforced Concrete, 9th Edition, USA: John Wiley & Sons, 2014.3. SNI 2847:2019 <i>Persyaratan Beton Struktural untuk Bangunan Gedung</i>, Jakarta: Badan Standardisasi Nasional, 20134. Materi Kampus Merdeka – Pengenalan Kolom dan Kolom Pendek oleh Maris Setyo Nugroho, M.Eng5. Materi pelat dua arah metode desain langsung dikutip dari <i>youtube channel</i> Zain Saeed
Date of last amendment made	January 9 th 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150872
Subtitle, if applicable	-
Course, if applicable	Soil Mechanics Practice
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of Courses
Lecturer	Drs. Daryati, M.T
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to apply building engineering practices, both at the planning, implementation, and evaluation stages is offered in the fourth semester.
Type of teaching, contact hours	Teaching method used in this course is Student Active Learning. This course meets 47 hours for lecture, 28 hours for assignments, and 28 hours for individual study.
Workload	Students are required to meet a minimum of 103 hours in one semester, which consist of: - 47 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Soil Mechanics
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards. Intended Learning Outcomes Special Competence (SC3):

	<p>Able to practice jobs in the field of building engineering education using hardware.</p> <p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to perform soil physical properties testing. • Able to test soil mechanical properties. • Able to carry out soil investigations in the field.
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Content	<p>Students will learn about: Soil investigation according to the Indonesian National Standard (SNI) procedures which include soil investigation in the field and soil testing in the laboratory.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students who do not attend, whether with notification or not, more than 20% of the total meeting are considered not to pass and get an E. - A few minutes late to class is allowed to join the lecture, if only the class starts at 8 o'clock. - Late entry to class more than 1-15 minutes is not allowed to attend the lecture, if class starts at 9 onwards. - Delay in submitting the assignments for 1-7 days from the specified deadline will result in a 20 points deduction from a total of 1-100 points. - Late submission of the assignments for more than 7 days from the specified deadline will get a score of 0. - Students who do not take the exam or do not submit the assignments without informing the lecturer will be awarded a D on the tests/assignments. - Students must comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be given an E score on the exam. - Students are not allowed to wear clothes that show their genitals (tight/transparent) and wear sandals - Students are required to wear Lab Coats and shoes - Students should not use any communication tools for purposes that are not related to learning. - Student should not make any noise that disturbs the order of learning.

	<p>- Students are required to present their identity in the form of writing, pictures, or videos.</p> <p>Form of examination: Written exam: Essay</p>
Media employed	Laboratory Equipment, Google Classroom, Zoom Meeting
Reading list	1. Soil Mechanics Practicum Module
Date of last amendment made	January 9 th 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151602
Subtitle, if applicable	-
Course, if applicable	Structure Analysis Program
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Arris Maluana , ST, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to operate building engineering software is offered in the fourth semester.
Type of teaching, contact hours	Teaching method used in this course is Project Based Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must pass Engineering Mechanics 1 and 2 courses.
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 7: Able to communicate verbally and in writing comprehensively and communicatively in building engineering education. Intended Learning Outcomes Special Competence (SC3):

	<p>Able to practice work in the field of building engineering education using hardware.</p> <p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to operate SAP 2000 software in building engineering mechanical analysis applications. • Able to analyze the types of structures that exist in the SAP 2000 software.
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Content	<p>Students will learn about: Able to master the concepts and characteristics of using computer aids/application software to analyze building structures.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times, it is considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Fail to submit assignments on time will be considered as not submitting. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a doctor's certificate or a certificate from their parents will not be allowed to take the follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be

	<p>removed from the class list and considered withdrawn.</p> <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students should dress cleanly, neatly, and politely, and wear shoes. - Students should not use any communication tools for purposes that are not related to learning. - Students should not make any noise that disturbs the order of learning. - Questions and answers that take place during learning must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD / Projector
Reading list	<ol style="list-style-type: none"> 1. Casita, Cintantya. dkk. 2019. Program Analisa Structure SAP2000. Klaten: Penerbit Lakeisha 2. Sholeh, Nur. 2021. Analisa Struktur SAP2000 v22. Jakarta: Pustaka Pranala 3. Andrianto. 2007. Analisa Struktur Gedung dengan ETABS versi 9.0.7. Jakarta: PT Elex Media Komputindo
Date of last amendment made	January 9 th 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-076-3
Subtitle, if applicable	-
Course, if applicable	Mechanical Soil Transfer / Highway
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Santoso Sri Handoyo, MT.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to combine scientific concepts in the field of building construction is offered in the fourth semester.
Type of teaching, contact hours	Teaching method used in this course is Case-based Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 119 hours in one semester, which consist of: - 35 hours for lecture; - 42 hours for structured assignments; - 42 hours for individual study.
Credit points	3 credit points (equivalent with 4.5 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes PLO 4: Able to apply basic knowledge of science that supports expertise in the field of building engineering education.</p> <p>Intended Learning Outcomes General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process. General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physical and its impact on the environment, to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate the basic concepts of mechanical earthmoving and the basic concepts of highways. • Able to implement calculation concepts in managing equipment resources for a job. • Able to design road alignment plans along with the road geometry and complementary buildings.
<p>Content</p>	<p>Students will learn about: Definition of Roads, Rumija, Rumaja, Ruwasja, and the Laws and Regulations Governing Roads; Roadwork Planning in The Field; Road Planning Criteria; Geometric Road Planning; Geotechnical and Road Materials; Pavement Layer Planning and Design; Road Drainage; Buildings and Road Complementary Materials; Estimated Road Cost Budget; Definition/Understanding of Mechanical Land Transfer, And Types of Mechanical Land Transfer Equipment; Land Clearing Work; Excavation Work; Hoarding Work.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Attendance for the face-to-face classes at least 80% of the ideal number of meetings (see university academic regulations). - Be present in class on time according to the time specified/agreed. - Students must inform the lecturer if they do not attend the class due to sickness, etc.

	<p>Lateness:</p> <ul style="list-style-type: none"> - Lateness tolerance is 10 minutes. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without any notice will be given a D on the exam/assignment. <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Wear polite and neat clothes (shirts) and are not allowed to wear T-shirts. - Students should not use any communication tools for purposes that are not related to learning. - Ask permission (by raising hand) if students want to talk, ask questions, answer, leave the class or other purposes. - Every student must be active and participative in class. - During class, the cellphone is turned off or silent. - Respect each other and should not make any noise, disturbance or damage in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Wear clothes (shirts) that are polite and neat and are not allowed to wear T-shirts and are recommended to be in a conducive place. - Students are asked to present their identity in the form of writing, pictures, or videos. - Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes. - During class, the cellphone is turned off or silent. - Ask permission (by activating the raise hand feature or raise your voice) if students want to talk, ask questions, answer, leave class or other purposes. - Orderly and does not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector

<p>Reading list</p>	<ol style="list-style-type: none"> 1. AASHTO. <i>A Policy on Geometric Design of Highway and Streets</i>. 1984. 2. Clarkson. <i>Highway Engineering</i>. John Wiley and Sons, 1996. 3. Hendarmin, Affandi. <i>Jalan Raya</i>. Jakarta: FT UNJ, 2007. 4. Hendarmin, Affandi. <i>Pemindahan Tanah Mekanis</i>. Jakarta: FT UNJ, 2007. 5. Hendarsin, Shirley L. <i>Perencanaan Teknik Jalan Raya</i>. Bandung: Politeknik Negeri Bandung, 2000. 6. Rostiyanti, Susi Fatena. <i>Alat Berat Untuk Proyek Konstruksi</i>. Jakarta: Rineka Cipta, 2008. 7. Soekirman, Silvia. <i>Dasar-dasar Perencanaan Geometrik Jalan</i>. Jakarta: Nova, 2000. 8. Supriyadi, Bambang and Agus Setyo Munharto. <i>Jembatan</i>. Yogyakarta: Beta Offset, 2007. 9. Departemen Pekerjaan Umum. Direktorat Jenderal Bina Marga. <i>Peraturan Perencanaan Geometrik Jalan Perkotaan</i>. 1998. 10. Departemen Pekerjaan Umum. Direktorat Jenderal Bina Marga. <i>Tata Cara Perencanaan Geometrik Jalan Antar Kota (TPGJAK)</i>. 1997.
<p>Last of date amendment made</p>	<p>January 9th 2017</p>

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-110-2
Subtitle, if applicable	-
Course, if applicable	Theory and Practice Land Measurement I
Semester(s) in which the module is taught	Fourth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Prihantono, ST., M.Eng.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to apply building engineering practices, both at the planning, implementation, and evaluation stages is offered in the fourth semester.
Type of teaching, contact hours	Teaching method used in this course is Project-based learning. This course meets 23 hours for lecture, 28 hours for assignments, and 28 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education. PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards.

	<p>Intended Learning Outcomes</p> <p>General Competence (GC1): Able to apply basic knowledge of mathematics and physics in engineering mechanics concepts to support the learning process.</p> <p>General Competence (GC2): Able to apply knowledge of science to support building construction related to infrastructure, both physical and its impact for the environment, and to support the learning process.</p> <p>Special Competence (SC3): Able to practice works in the field of building engineering education using hardware.</p> <p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate the concept of measuring land. • Able to implement the practice of soil surveying.
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<p>Content</p>	<p>Students will learn about: Understanding Land Surveying; Soil Measurement; Simple Soil Measuring Tools; Measurement with Simple Measuring Instruments; Introduction to Spirit Level & Theodolite Measuring Instruments; Transverse Profiles Measurement; Transverse Profiles; Polygon with Waterpass and Theodolite; Calculation and Depiction of Practice Results, Making Reports, Making Arcs in The Field.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Attendance for the face-to-face classes at least 80% of the ideal number of meetings (see university academic regulations). - Be present in class on time according to the time specified/agreed. - Students must inform the lecturer if they do not attend the class due to sickness, etc. <p>Lateness:</p> <ul style="list-style-type: none"> - Lateness tolerance is 10 minutes. If the tolerance time limit is exceeded, the person concerned can still attend the class, but the attendance list is given an alpha value. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments

	<p>without any notice will be given a D on the exam/assignment.</p> <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Wear polite and neat clothes (shirts) and are not allowed to wear T-shirts. - Students should not use any communication tools for purposes that are not related to learning. - Ask permission (by raising hand) if students want to talk, ask questions, answer, leave the class or other purposes. - Every student must be active and participative in class. - During lectures, the cellphone is turned off or silent. - Respect each other and should not make any noise, disturbance or damage in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Wear clothes (shirts) that are polite and neat and are not allowed to wear T-shirts and are recommended to be in a conducive place. - Students are asked to present their identity in the form of writing, pictures, or videos. - Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes. - During class, the cellphone is turned off or silent. - Ask permission (by activating the raise hand feature or raise your voice) if students want to talk, ask questions, answer, leave class or other purposes. - Orderly and does not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. Bahan Penataran IKIP Padang. 2. Depdikbud. <i>Teori & Praktek Ukur Tanah Jilid I & II</i>. 3. Depdikbud. <i>Latihan Praktek Ukur Tanah dan Pemetaan</i>. 4. Heinz, Frick. <i>Ilmu dan Alat Ukur Tanah</i>. Jogjakarta: Kanisius, 1985. 5. Mansur, Muhamadi. <i>Ilmu Ukur Tanah I</i>. ITS Surabaya. 6. Moffit, H. Francis dan Horry Bouchard. <i>Surveying</i>. Harver & Rawab. 7. PT. Jaya Konstruksi. <i>Teknik Pengukuran</i>. 8. Sutomo, Wongso Citro. <i>Ilmu Ukur Tanah</i>. Jogjakarta: Kanisius, 1980.

	9. Zulfahmi, Amir. <i>Surveying</i> . Padang: Andalas, 1988.
Date of last amendment made	January 9 th 2017

Semester 5

List of Courses:

- 01** Learning Evaluation
- 02** Budget Plan
- 03** Environmental Management and Impact Analysis
- 04** Wood Practice
- 05** Engineering Mechanics IV
- 06** Hydrology
- 07** Foundation Engineering I
- 08** Research Methodology
- 09** Theory and Practice Land Measurement II
- 10** Entrepreneurship

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5005-019-3
Subtitle, if applicable	-
Course, if applicable	Learning Evaluation
Semester(s) in which the module is taught	Fifth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Tuti Iriani, M.Si
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory course to evaluate and provide recommendations on the vocational learning process based on the concept of measurement is offered in the fifth semester.
Type of teaching, contact hours	Teaching method used in this course is the Student Center Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consists of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	3 credit points (equivalent with 4.5 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must pass Lesson Planning Course.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes</p> <p>PLO 1: Able to apply pedagogical discipline, namely by planning, implementing, and evaluating learning programs in building engineering education.</p> <p>Intended Learning Outcomes</p> <p>Knowledge (K1): Able to apply learning and learning theory according to the age development of vocational (SMK) students based on Indonesian education foundation.</p> <p>Knowledge (K2): Able to implement the planning, implementation, and evaluation of learning in the SMK Building Engineering by the management of vocational education.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate the concept of learning evaluation. • Able to organize tests for learning in the Vocational School. • Able to evaluate questions and programs that been planned.
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<p>Content</p>	<p>Students will learn about: Definition of Learning Evaluation; Learning Evaluation Objectives; Types of 2013 Curriculum-Based Assessments; Tests and Non-Tests Preparation; Question Box; Preparation of Objective Questions and Essay; Validity and Reliability; Score; PAN & PAP; Difficulty Level Analysis, Differential Analysis And Problem Analysis.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students attend face-to-face classes at least 80% of the ideal number of meetings. Every student must be active and participative in class. - Students must inform the lecturer if they do not attend the class due to sickness, etc. <p>Lateness:</p> <ul style="list-style-type: none"> - Lecturers and students arrive in class on time according to the lateness tolerance of 15 minutes.

	<p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Assignments are submitted according to the agreement between the lecturer and students. Late submissions will not be accepted. - Mid-Test and Final Test must be followed according to the agreed schedule. <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. - If plagiarism is found with fellow friends, the score will be given 0. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - During lectures, the cellphone is turned off or silent. - Ask permission (by raising hand) if students want to talk, ask questions, answer, leave class or other purposes. - Respect each other and should not make any noise/disruption/damage in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Online classes attended by students are already registered in the KRS. - Online classes must be done via Zoom/ WhatsApp groups/ Google Classroom during the class process. - Must login according to the schedule determined by the Faculty/Head of Study Programs/Lecturer. - Must follow the online learning process and be ready in front of the camera if the lecturer instructs and follows the class properly. - During zoom lessons, students must be in front of the camera. - Students are required to fill the attendance at schoology for every meeting. - Students must take quiz via Quizziz. - Students must dress neatly and pay attention to the ethics and aesthetics of the room at the time of the meeting. - If students want to ask the lecturer, students can give codes or text message to the lecturer. - Every student is required to follow the rules of online classes. <p>Form of examination: Written exam</p>
Media employed	LCD Projector

Reading list	<ol style="list-style-type: none"> 1. Arikunto, Suharsimi. <i>Dasar-dasar Evaluasi Pendidikan</i>. Jakarta: Bumi Aksara, 2008. 2. Asrul, Rusidy dan Rosnita Ananda. <i>Evaluasi Pembelajaran</i>. Citra Pustaka Media, 2015. 3. Arifin, Zaenal. <i>Evaluasi Pembelajaran: Prinsip, Teknik, Prosedur</i>. Bandung: Rosdakarya, 2009. 4. Departemen Pendidikan Nasional. <i>Penilaian Hasil Belajar Siswa Sekolah Menengah Kejuruan</i>. Depdiknas Dirjen Manajemen Pendidikan Dasar dan Menengah. Direktorat Pembinaan Sekolah Menengah Kejuruan, 2008. 5. Haryati, Mimin. <i>Model dan Teknik Penilaian pada Tingkat Satuan Pendidikan</i>. Jakarta: Gaung Persada Press, 2007. 6. Iriani, Tuti dkk. <i>Evaluasi Pembelajaran</i>. Jakarta: FT Press, 2009. 7. Soeprijanto. <i>Pengukuran Kinerja Guru Praktik Kejuruan</i>. Jakarta: CV. Tursina, 2010. 8. Widoyoko, Eko Putro. <i>Evaluasi Program Pembelajaran</i>. Yogyakarta, 2009.
Date of last amendment made	July 4 th 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150962
Subtitle, if applicable	-
Course, if applicable	Budget Plan
Semester(s) in which the module is taught	Fifth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Lenggogeni, ST., MT. and R. Eka M.N., M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to design building engineering based on existing materials is offered in the fifth semester.
Type of teaching, contact hours	Teaching method used in this course is Project-based Learning. This course meets 35 hours for lecture, 42 hours for assignments, and 42 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course in this given case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology. Intended Learning Outcomes

	<p>Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process.</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used to support expertise in the field of building engineering education.</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts in accordance with the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate the construction project auctions and the types and aspects of the construction contracts. • Able to compile documents in S-Curve Plan construction project bidding. • Able to calculate the construction costs and make WBS, simple construction work unit prices, Bill of Quantity, and Cost Recapitulation simple construction project.
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Students are able to explain about construction project auctions. - Students are able to make documents in construction project auctions. - Students are able to understand and explain the types and aspects of construction contracts. - Students are able to make S-Curve Plans. - Students are able to explain about construction costs and make WBS. - Students are able to calculate the volume of work on a simple construction project. - Students can calculate the unit price of simple construction work. - Students are able to calculate Bill of Quantity and Cost Recapitulation of simple construction projects.
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not attend lectures more than 3 times are considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts. - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance. - If students arrive more than 30 minutes late, they are not allowed to attend lectures. - Assignments are submitted on time as agreed. Fail to submit assignments on time will be considered as not submitting. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a doctor's certificate or a certificate from their parents will not be allowed to take the follow-up exam. - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students should dress cleanly, neatly, and politely, and wear shoes. - Students should not use any communication tools for purposes that are not related to learning. - Students should not make any noise that could disturbs the order of learning. - Questions and answers that take place during lectures must be carried out in a good manners and ethics. - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>

<p>Reading list</p>	<ol style="list-style-type: none"> 1. Asiyanto. "Project Cost Control". Jakarta : Erlangga, 2006. 2. Barry, Donald S., and Paulson. "Manajemen Proyek Profesional". Jakarta : Erlangga, 1998 3. Clough, Richard H. "Construction Contracting". New York, McGraw Hill, 1998. 4. Dipohusodo, Istimawan. "Manajemen Proyek". Jakarta : Erlangga, 1996. 5. Ibrahim, Bachtiar. "Rencana dan Estimate Real of Cost". Jakarta : Bumi Aksara, 2007 6. Soeharto, Iman. "Manajemen Proyek, Dari Konseptual Hingga Operasional". Jakarta: Erlangga, 1998. 7. SNI 2008 tentang Tata Cara Perhitungan Harga Satuan Pekerjaan 8. Daftar Harga Material Terbaru 9. Hasil Penelitian : http://journal2.um.ac.id/index.php/jip/article/view/14096/5747 10. E-media ajar : http://bit.ly/Modul_Estibi_SipilUNJ 11. Asiyanto. "Project Cost Control". Jakarta : Erlangga, 2006. 12. Barry, Donald S., and Paulson. "Manajemen Proyek Profesional". Jakarta : Erlangga, 1998 13. Clough, Richard H. "Construction Contracting". New York, McGraw Hill, 1998. 14. Dipohusodo, Istimawan. "Manajemen Proyek". Jakarta : Erlangga, 1996. 15. Ibrahim, Bachtiar. "Rencana dan Estimate Real of Cost". Jakarta : Bumi Aksara, 2007 16. Soeharto, Iman. "Manajemen Proyek, Dari Konseptual Hingga Operasional". Jakarta: Erlangga, 1998. 17. SNI 2008 tentang Tata Cara Perhitungan Harga Satuan Pekerjaan 18. Daftar Harga Material Terbaru 19. Hasil Penelitian : http://journal2.um.ac.id/index.php/jip/article/view/14096/5747 20. E-media ajar : http://bit.ly/Modul_Estibi_SipilUNJ 21. Project Management Body of Knowledge, 2016 22. Halpin, Daniel dan Woodstock. "Construction Management". John Wiley, 1998.
<p>Date of last amendment made</p>	<p>July 4th 2016</p>

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150702
Subtitle, if applicable	-
Course, if applicable	Environmental Management and Impact Analysis
Semester(s) in which the module is taught	Fifth Semester
Person responsible for the module	Lecturer of the course
Lecturer	Prof. Dr. Henita Rahmayanti, M.Si
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This compulsory subject to analyze phenomena in the field of building construction with the basic principles of natural science is offered in the fifth semester.
Type of teaching, contact hours	Teaching method used in this course is the Student Active Learning. This course meets 23 hours of lecture, 28 hours for assignments, and 28 hours for individual study.
Workload	Students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for individual study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course in this given case:</p> <p>Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education.</p> <p>Intended Learning Outcomes General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process. General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physical and its impact on the environment, and to support the learning process.</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to elaborate the basic concepts of Environmental Management and Impact Analysis. • Able to elaborate environmental management in accordance with the concept of sustainable development. • Able to describe the Environmental Management and Impact Analysis submission in the process of implementing building construction.
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<p>Content</p>	<p>Students will learn about:</p> <p>Understand the environment, life on earth, environmental issues, ecology, ecosystems, people and natural resources, understand the basics of analyzing environmental impacts, and understand the environment and how to protect it. Interaction of population, environment and development, environmental policy, environmental education, environmentally sound development, EIA, global environment.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignments: 30%, Mid-Test: 20%, Final Test: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students attend face-to-face lectures at least 80% of the ideal number of meetings. - Be present in class on time according to the time specified/agreed. - Students must inform the lecturer if they do not attend the class due to sickness, etc. - Lateness tolerance is 10 minutes. If the tolerance time limit is exceeded, the student is considered absent. - Students who do not take the exam or do not submit assignments without any notice will be awarded a D on the exam/assignment.

	<ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. - During lectures, the cellphone is turned off or silent. - Ask permission (by raising your hand) if you want to talk, ask questions, answer, leave class or other purposes. - Respect each other and should not make any noise/disruption/damage in the classroom. - Wear neat and polite clothes during lectures, and in accordance with the rules. - Students are not allowed to wear clothes that show their genitals (tight/transparent). <p>Form of examination: Written exam: Essay</p>
Media employed	Computer/Laptop, Google Classroom
Reading list	<ol style="list-style-type: none"> 1. Chiras, Daniel D (1991). Environment Science Action for a Sustainable Future. California: The Benyamin/Cumming Publ. Company Inc. Third Ed. 2. Darsono, Valentinus(1995). Ilmu Lingkungan. Yokyakarta: Universitas Atma Jaya 3. Engel, Ronald J & Engel, Gibb Joan (1990). Ethics of Environment and Development, Global Challenge and International Response. London: Belhaven Press. 4. Neolaka, Amos (2008). Kesadaran Lingkungan. Jakarta; PT. Rineka Cipta 5. Soeryani, Mohamad, Yuwono, Arief & Fardiaz Dedi (2007). Lingkungan Hidup, Pendidikan, Pengelolaan Lingkungan dan Kelangsungan Pembangunan. Jakarta: IPPL. 6. Soeryani, Mohamad (2008). Konsep Dasar Lingkungan Hidup, untuk Pengelolaan Ekosistem bagi Kelangsungan Kehidupan. Jakarta: Institut Pendidikan dan Pengembangan Lingkungan/IPPL. 7. Soerjani, Mohamad (2007). Kebijakan Lingkungan Dalam Pengelolaan dan Pengembangan Agroforestri. Jakarta: IPPL. 8. Fandeli, CItafid (1992). Analisis Mengenai Dampak Lingkungan. Yokyakarta: Liberty. 9. UU No. 32 Tahun 2009 tentang perlindungan dan Pengelolaan Lingkungan Hidup. 10. PP No. 27 Tahun 2012 tentang Izin Lingkungan
Date of last amendment made	July 4 th 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-080-2
Subtitle, if applicable	-
Course, if applicable	Wood Practice
Semester(s) in which the module is taught	V
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Arief Saefudin, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to able to apply building engineering practices, both at the planning, implementation, and evaluation stages and offered in the 5 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Student Center Learning This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards</p> <p>Intended Learning Outcomes Special Competence (SC3): Able to practice jobs in the field of building engineering education using hardware Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain functions and usage of manual woodworking tools, portable woodworking machine tools, and stationary woodworking machine tools; • Able to explain work drawing and build wood, doors, and windows out of wood.
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<p>Content</p>	<p>Students will learn about: Identify The Scope of Wood Work; Understand and Able To Use Portable Woodworking Machine Tools; Understand and Able To Use Stationary Woodworking Tools.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the ideal number of meetings (see university academic rules). <p>Lateness:</p> <ul style="list-style-type: none"> - Late entry to class for 5 minutes is permitted to attend the meeting, if class starts at 08.00; - Late entry to class more than 15 minutes is not allowed to attend the meeting, if class starts at 9 onwards; - Late submission of assignments for 7 days from the set deadline will result in a 10 points deduction from a total of 1-100 points; - Late submission of assignments for more than 7 days from the set deadline will get a value of 0.

	<p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment. <p>Academic fraud:</p> <ul style="list-style-type: none"> - Students must comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be given an E score on the exam. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight/transparent clothes; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students are not allowed to make noises that might disturbs the order of learning. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight/transparent clothes; - Students are required to present their identities in the form of writings, images, or videos; - Students are given a tolerance of 5 minutes to join in the case of network problems. <p>Form of examination: Written exam: Essay</p>
Media employed	Youtube, Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. Budianto, Dodong A. <i>Mesin Tangan Industri Kayu</i>. Yogyakarta: Kanisius, 1995. 2. Depdiknas. <i>Petunjuk Pengerjaan Kayu</i>. Jakarta: 2006. 3. Frick, Heinz. <i>Ilmu Konstruksi Bangunan Kayu</i>. Yogyakarta: Kanisius, 1998. 4. Ibrahim, Bachtiar H. <i>Rencana dan Estimate Real of Cost</i>. Jakarta: Bumi Aksara, 1993. 5. Wiryomartotno, Suwarno. <i>Konstruksi Kayu Jilid I</i>. Yogyakarta: Fakultas Teknik Universitas Atmajaya, 1975. 6. Yap, Felix KH. <i>Konstruksi Kayu</i>. Bandung: Bina Cipta, 1984.
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150732
Subtitle, if applicable	-
Course, if applicable	Engineering Mechanics 4
Semester(s) in which the module is taught	V
Person responsible for the module	Lecturer of the course
Lecturer	Anisah, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to able to solve problems related to building engineering and offered in the 5 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Student Active Learning/PBL/CBL. This course meets 35 contact hours for lecture, 42 contact hours for assignment, and private study for 42 contact hours.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Engineering Mechanics 1, Engineering Mechanics 2, Engineering Mechanics 3

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes</p> <p>Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to analyze loading that acts on the structure to determine the amount of internal force through stiffness method; • Able to analyze loading that acts on the structure to determine the amount of internal force through flexibility method.
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<p>Content</p>	<p>Students will learn about:</p> <p>Able to understand the matriculative approach model of the loading analysis process that acts on the structure, in the application of the method; stiffness (stiffness method) in the analysis of the value of the "internal force" at discrete points contained in the structure.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times will be considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts; - If any students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but not included in the attendance; - If any students arrive more than 30 minutes late, they are not allowed to attend lectures; - Assignments are submitted on time as agreed. Default in submitting assignments on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam; - Students who do not submit major assignments will be declared to not passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students are not allowed to make any noises that might disturb the order of learning; - Questions and answers that take place during learning must be carried out in a good manners and ethics; - Mutual respect among fellow students must be implemented. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>

Reading list	<ol style="list-style-type: none"> 1. Benny Poespantoro, <i>Teori & Analisis Balok Grid</i>, Penerbit Andi Offset, Yogya-karta, 1993. 2. Gere, James M. & William Weaver, Jr., <i>terj.</i>, <i>Aljabar Matriks untuk Para Insinyur</i>, Penerbit ERLANGGA, Jakarta, 1987. 3. Supartono, F.X. dan Teddy Boen, <i>Analisa Struktur dengan Metode Matrix</i>, Penerbit Universitas Indonesia (UI-Press), 1982. 4. Wang, Chu Kia, <i>Statically Indeterminate Structures</i>, Mc-Graw Hill Kogakusha, Ltd., Tokyo, 1980. 5. Weaver, William, Jr., <i>terj.</i>, <i>Analisa Matriks untuk Struktur Rangka</i>, Penerbit Gramedia, Jakarta, 1992.
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150472
Subtitle, if applicable	-
Course, if applicable	Hydrology
Semester(s) in which the module is taught	V
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Arris Maluana , S.T, M.T
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to solve problems related to building engineering and offered in the 5 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Teacher Center Learning. This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education Intended Learning Outcomes General Competence (GC1):

	<p>Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the basic concept of hydrological cycles and calculate hydrological parameters; • Able to calculate hydrological design quantity for water building planning.
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Content	<p>Students will learn about: Theoretical concepts and be able to apply them to the analysis of water building planning problems. Lecture materials include hydrological cycles, river ecosystems, erosion and sedimentation of rainfall and their analysis, and as well as calculation of maximum discharge.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students should attend face-to-face lectures at least 80% of the total number of meetings; - Students should be present in class on time according to the time set/agreed; - Students should notify the lecturers prior to the meeting in the event of inability to present in face-to-face lectures; - Students are given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the student is considered absent; - Students who do not take the exam or do not submit assignments without notice will be given a D on the exam/assignment; - There should be no plagiarism and other forms of violation of norms; - During the lecture, cellphones are required to be turned off or being set to silent; - Students should ask for permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Students should respect each other and do not make any noises/disruptions/damages in class; - Students should wear neat and polite clothes during lectures; - Students are not allowed to wear clothes that show their genitalia (tight/transparent); - Students are required to present their identity in the form of

	writings, images, or videos; Form of examination: Written exam: Essay
Media employed	Laptop/Computer, LMS, Zoom, Google Classroom, Google Meet
Reading list	<ol style="list-style-type: none"> 1. Hartono, Sri. 1993. <i>Analisis Hidrologi</i>. Jakarta: PT Gramedia Pustaka Utama 2. Suprayodo, Didik. dkk. 2017. <i>Manajemen Daerah Aliran Sungai</i>. Malang: UB Press 3. Syarifudin. 2017. <i>Hidrologi Terapan</i>. Yogyakarta: Penerbit ANDI
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-093-2
Subtitle, if applicable	-
Course, if applicable	Foundation Engineering I
Semester(s) in which the module is taught	V
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Santoso Sri Handoyo, M.T.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to solve problems related to building engineering and offered in the 5 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Case-based Learning This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Soil Mechanics, Engineering Mechanics I and Engineering Mechanics II

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain classifications and variety of foundation; • Able to determine the support capacity based on the results of soil investigation and foundation decline; • Able to plan shallow foundation.
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<p>Content</p>	<p>Students will learn about: Foundation Classification; Soil Investigation; Types of Foundation Collapse; Carrying Capacity Theory (Terzaghi, Meyerhof, Brinch Hansen, Vesic); Stress Distribution in Soil; Foundation Decline; Separate Footprint Foundation Planning; Longitudinal Foundation Planning; Joint Foot Foundation Planning; Cantilever Foot Foundation Planning; Raft Foundation Planning</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the total number of meetings (see university academic rules); - Students should be present in class on time according to the time

set/agreed;

- There should be a notification if there any students who do not attend a face-to-face class.

Lateness:

- Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value.

Not taking exams/not submitting assignments:

- Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment.

Academic fraud:

- There should be no plagiarism and other forms of violation of norms.

Ethics in offline classes:

- Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts;
- Students are not allowed to use communication tools for purposes that are not related to learning;
- Students should ask for permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes;
- Every student must be active and participative in class;
- During the class, cellphones are required to be turned off or being set on silent;
- Respect each other and do not make any noises, disturbances or damages in the classroom.

Ethics in online classes:

- Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place;
- Students are required to present their identity in the form of writings, images, or videos;
- Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes;
- During the class, cellphones are required to be turned off or being set on silent;
- Students should ask for permission (by activating the raise hand or unmute voice feature) if they want to talk, ask questions, answer, leave class or other needs;

	<p>- Students should be orderly and do not activate the sound (unmute), when the lecturer explains the material.</p> <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. Bowles, Joseph E. <i>Foundation Analysis and Design Fifth Edition</i>. McGraw Hill Companies Inc., 1997. 2. Coduto, Donald P. <i>Foundation Design: Principles and Practices (2nd Edition)</i>. Prentice-Hall Inc., 2001. 3. Hardiyatmo, Hary Christady. <i>Analisis & Perancangan Fondasi Bagian 1 edisi ke 2</i>. Gajah Mada University Press, 2011.
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5005-022-2
Subtitle, if applicable	-
Course, if applicable	Research Methodology
Semester(s) in which the module is taught	V
Person responsible for the module	Lecturer of the course
Lecturer	R. Eka Murtinugrah, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to solve problems related to building engineering and offered in the 5 th semester.
Type of teaching, contact hours	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> - Student Center Learning - Blended Learning <p>This course meets 23 contact hours for lecture, 28 contact hours for assignment, 28 contact hours for private study.</p>
Workload	<p>For this course, students are required to meet a minimum of 79 hours in one semester, which consist of:</p> <ul style="list-style-type: none"> - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 2: Able to apply basic and applied research by analyzing relevant theory-based problems in the field of building engineering education teaching</p> <p>Intended Learning Outcomes Knowledge (K3): Able to apply research methodologies and applied statistics in basic and applied research in the field of building engineering education</p> <p>Attitude (A1): Able to collaborate with teams by applying professional oral and written communication</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain research methodology concepts; • Able to design research, particularly in class act research.
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<p>Content</p>	<p>Students will learn about: Introduction, Understanding Research Methods, Scientific Disciplines, Scientific Methods, Types Of Research Methods, Research Steps, Problem Posing, Problem Identification, Problem Scope, Formulation, Problem Use. Theoretical Framework, Thinking Framework, Hypothesis, Research Methodology, Sampling Technique, Research Variables, Data Collection Techniques, Instruments, Instrument Testing, Validity, Reliability, Research Design, Data Analysis Procedures and Techniques, Statistical Hypotheses, Analysis Requirements, Research Proposal Framework, Research Data Presentation Techniques, Quantitative, Qualitative, Testing and Research Results, Discussion, Research Weaknesses, Scientific Notation Techniques, Conclusions, Implications and Suggestions, Abstracts, Research Attachments.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the total number of meetings (see university academic rules); - Students should be present in class on time according to the time set/agreed; - There should be a notification if student do not attend the face-to-face class.

Lateness:

- Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value.

Not taking exams/not submitting assignments:

- Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment.

Academic fraud:

- There should be no plagiarism and other forms of violation of norms.

Ethics in offline classes:

- Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts;
- Students are not allowed to use communication tools for purposes that are not related to learning;
- Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes;
- Every student must be active and participative in class;
- During the class, cellphones are required to be turned off or being set on silent;
- Respect each other and do not make any noises, disturbances or damages in the classroom.

Ethics in online classes:

- Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place;
- Students are required to present their identity in the form of writings, images, or videos;
- Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes;
- During the class, cellphones are required to be turned off or being set on silent;
- Students should ask for permission (by activating the raise hand or unmute voice feature) if they want to talk, ask questions, answer, leave class or other needs;
- Students should be orderly and do not activate the sound (unmute), when the lecturer explains the material.

Form of examination:

	Written exam: Essay
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. Moleong, Lexy J. <i>Metode Penelitian Kualitatif</i>. Bandung: PT. Remaja Rodakarya, 2010. 2. Neolaka, Amos. <i>Metode Penelitian dan Statistik (Cetakan ke-2)</i>. Bandung: PT. Remaja Rosdakarya, 2016. 3. Sugiyono. <i>Metode Penelitian Kombinasi (Mixed Methods)</i>. Bandung: Alfabeta, 2012. 4. Sugiyono. <i>Metode Penelitian Kuantitatif Kualitatif dan R&D</i>. Bandung: Alfabeta, 2013.
Date of last amendment made	July 6 th ,2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-111-2
Subtitle, if applicable	-
Course, if applicable	Theory and Practice Land Measurement II
Semester(s) in which the module is taught	V
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Prihantono, ST., M.Eng.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to apply building engineering practices, both at the planning, implementation, and evaluation stages and offered in the 5 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Case-based Learning This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards</p> <p>Intended Learning Outcomes</p> <p>Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC3): Able to practice jobs in the field of building engineering education using hardware</p> <p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain azimuth angles, coordinates, and its implementations; • Able to explain point determination in the field by utilizing theodolites and GPS tools.
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<p>Content</p>	<p>Students will learn about:</p> <p>Introduction to manual tools; Practice measuring roads with manual theodolites; Calculations; Introduction to Digital Theodolites; Practice Closed Polygons; Introduction to Total Stations; Practice Details of Polygons; Reporting of contour detail measurement results; Theory of manual/digital stake out measurements.</p>
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<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the total number of meetings (see university academic rules); - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class. <p>Lateness:</p> <ul style="list-style-type: none"> - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment. <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Every student must be active and participative in class; - During the class, cellphones are required to be turned off or being set on silent; - Respect each other and do not make any noises, disturbances or damages in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place; - Students are required to present their identity in the form of

	<p>writings, images, or videos;</p> <ul style="list-style-type: none"> - Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes; - During the class, cellphones are required to be turned off or being set on silent; - Students should ask for permission (by activating the raise hand or unmute voice feature) if any students want to talk, ask questions, answer, leave class or other needs; - Students should be orderly and do not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. SKKNI 2. Modul Pelatihan Ukur Tanah 3. Video Pelatihan Alat Alat Ukur Tanah Digital
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-135-2
Subtitle, if applicable	-
Course, if applicable	Entrepreneurship
Semester(s) in which the module is taught	V
Person responsible for the module	Lecturer of the course
Lecturer	R. Eka Murtinugrah, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to design building engineering based on existing materials and offered in the 5 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: <ul style="list-style-type: none"> - Student Center Learning - Blended Learning <p>This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.</p>
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: <ul style="list-style-type: none"> - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 5: Able to develop themselves by lifelong learning in the field of building engineering education</p> <p>Intended Learning Outcomes Attitude (A1): Able to collaborate with teams by applying professional oral and written communication</p> <p>General Competence (GC3): Able to develop themselves by lifelong learning to be able to solve problems in the field of building engineering education</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the concept of entrepreneurship; • Able to draw up a business plan.
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<p>Content</p>	<p>Students will learn about: The Concept of Entrepreneurship, How to Run A Business, Develop A Business Plan and Develop A Marketing Strategy.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the total number of meetings (see university academic rules); - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class. <p>Lateness:</p> <ul style="list-style-type: none"> - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment. <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of

	<p>norms.</p> <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Every student must be active and participative in class; - During the class, cellphones are required to be turned off or being set on silent; - Respect each other and do not make any noises, disturbances or damages in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place; - Students are required to present their identity in the form of writings, images, or videos; - Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes; - During the class, cellphones are required to be turned off or being set on silent; - Students should ask for permission (by activating the raise hand or unmute voice feature) if they want to talk, ask questions, answer, leave class or other needs; - Students should be orderly and do not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. West, Christ. <i>Menjadi Pengusaha</i>. 2. Singer, Blair. <i>Sales Dogs</i>. 3. Deutch, Donny. <i>The Big Idea</i>. 4. Sutton, Garet. <i>Business Plan</i>.
Date of last amendment made	July 4 th , 2016

Semester 6

List of Courses:

- 01** Statistics
- 02** Learning Competencies
- 03** Construction Management
- 04** Healthy Techniques
- 05** Foundation Engineering II
- 06** Hydraulics
- 07** Interior Design
- 08** Building Maintenance

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5005-014-2
Subtitle, if applicable	-
Course, if applicable	Statistics
Semester(s) in which the module is taught	VI
Person responsible for the module	Lecturer of the course
Lecturer	R. Eka Murtinugrah, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to identify data in the problem-solving process in the field of building engineering and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: <ul style="list-style-type: none"> - Student Center Learning - Blended Learning <p>This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.</p>
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: <ul style="list-style-type: none"> - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 2: Able to apply basic and applied research by analyzing relevant theory-based problems in the field of building engineering education teaching</p> <p>Intended Learning Outcomes Knowledge (K3): Able to apply research methodologies and applied statistics in basic and applied research in the field of building engineering education</p> <p>Attitude (A1): Able to collaborate with teams by applying professional oral and written communication</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain statistical calculations in testing hypotheses; • Able to conduct research with simple statistical analysis.
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<p>Content</p>	<p>Students will learn about: Statistical Calculations in Testing Hypotheses, Conducting Research with Simple Statistical Analysis, Understanding The Concept of Population, Sampling and Data Presentation, Frequency Distribution and Drawing Diagrams, Calculating Spread Sizes, Inferential/Inductive Calculations, and Applying Them to The SPSS Program.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the total number of meetings (see university academic rules); - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class. <p>Lateness:</p> <ul style="list-style-type: none"> - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value.

	<p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment. <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Every student must be active and participative in class; - During the class, cellphones are required to be turned off or being set on silent; - Respect each other and do not make any noise, disturbance or damage in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place; - Students are required to present their identity in the form of writings, images, or videos; - Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes; - During the class, cellphones are required to be turned off or being set on silent; - Students should ask for permission (by activating the raise hand or unmute voice feature) if they want to talk, ask questions, answer, leave class or other needs; - Students should be orderly and do not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	1. Djarwanto, P. S. dan Pangestu Subagyo. <i>Statistik Induktif</i> . Yogyakarta: BPFY-Yogyakarta, 1990.

	<ol style="list-style-type: none"> 2. Hardjodipuro, Siswojo. <i>Statistik Nonparametrik</i>. Jakarta: Dikti, Depdikbud, 1988. 3. Hardjodipuro, Siswojo. <i>10 Model Penelitian dan Pengolahannya dengan SPSS 10.01</i>. Semarang: Wahana Komputer, 2002. 4. Sudjana. <i>Metoda Statistika</i>. Bandung: Tarsito, 2001.
Date of last amendment made	January 9 th , 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5005-020-3
Subtitle, if applicable	-
Course, if applicable	Learning Competencies
Semester(s) in which the module is taught	VI
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Tuti Iriani, M.Si
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to apply building engineering practices, both at the planning, implementation, and evaluation stages and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Student Center Learning This course meets 35 contact hours for lecture, 42 contact hours for assignment, and 42 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 119 hours in one semester, which consist of: - 35 hours for lecture; - 42 hours for structured assignments; - 42 hours for private study.
Credit points	3 credit points (equivalent with 4.5 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must pass Lesson Planning Course and Learning Evaluation Course.

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 1:</p> <p>Able to apply the discipline of pedagogy, namely by planning, implementing, and evaluating learning programs in building engineering education</p> <p>Intended Learning Outcomes</p> <p>Knowledge (K1):</p> <p>Able to apply learning and learning theory according to the age development of vocational students based on the foundation of Indonesian education</p> <p>Knowledge (K2):</p> <p>Able to implement the planning, implementation, and evaluation of learning in the SMK Building Engineering by vocational education management</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain various theories in teacher and learning; • Able to demonstrate teaching methods in front of the class based on 8 teaching skills concepts.
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<p>Content</p>	<p>Students will learn about:</p> <p>Theory/Concept of Competence and Professionalism Of Vocational Teachers, 4 Teacher Competencies, 8 Teaching Skills, Instructional Communication and Preparing an Appropriate Learning Implementation Plan Based on The 2013 Curriculum.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students must attend face-to-face class at least 80% of the total number of meetings. Every student must be active and participative in class; - There should be a notification if there are any students who do not attend the face-to-face class. <p>Lateness:</p> <ul style="list-style-type: none"> - Lecturers and students arrive in class on time according to the 15 minutes delay tolerance given. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Assignments are submitted in accordance with the agreement between the lecturers and students. Late submission is not accepted;

	<ul style="list-style-type: none"> - Mid Test and Final Test must be followed according to the agreed schedule. <p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms; - If plagiarism is found with fellow friends, 0 value would be given. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - During the class, cellphones are required to be turned off or being set on silent; - Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Respect each other and do not make any noise/disruption/damage in class. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Online classes attended by students have been registered with KRS; - It is mandatory for students to do online classes via <i>Zoom/ WhatsApp group/ Google Classroom</i> during the class process; - Students must log in according to the schedule determined by the Faculty/Head of Study Programs/Lecturer; - Students must follow the online learning process and be ready in front of the camera if the lecturer instructs and the class should follow properly; - During <i>Zoom</i> lessons, students must turn on the camera; - Students should fill out mandatory attendance at Schoology for every meeting; - Students must take quizzes via <i>Quizziz</i>; - Students must dress neatly and pay attention to the ethics and aesthetics of the room at the time of the meeting; - If a student wants to ask the lecturer, the student can give the code or text message to the lecturer; - Every student is required to comply with the rules of online classes. <p>Form of examination: Written exam</p>
Media employed	LCD Projector

Reading list	<ol style="list-style-type: none"> 1. Dharma, Surya, dkk. <i>Tantangan Guru SMK Abad 21 Direktorat Pembinaan Pendidik dan Tenaga Kependidikan Pendidikan menengah</i>. Direktorat Jenderal Pendidikan Menengah Kemendikbud, 2013. 2. Iriani, Tuti dan Santoso Sri Handoyo. <i>Kompetensi Pembelajaran untuk Kejuruan</i>. Jakarta: Edura, 2021. 3. Munawar, Wahid. <i>Peningkatan Profesionalisme Guru Teknologi Kejuruan Melalui Keterampilan Merancang dan Mengembangkan Multimedia Interaktif Offline</i>. Yogyakarta: ADGVI, 2011. 4. Spencer, M. Lyle and M. Signe Spencer. <i>Competence at Work: Models for Superior Performance</i>. New York USA: John Wily & Son, Inc., 1993. 5. Usman, Moh. Uzer. <i>Menjadi Guru Profesional</i>. Bandung: Rosdakarya, 2006. 6. Kunandar. <i>Guru Profesional, Implementasi Kurikulum Tingkat Satuan Pendidikan (KTSP) dan Sukses dalam Sertifikat Guru</i>. Jakarta: PT. Raja Grafindo Persada, 2007. 7. Mulyasa, E. <i>Menjadi Guru Profesional, Menciptakan Pembelajaran yang kreatif dan Menyenangkan, Cetakan VI</i>. Bandung: Bandung: Rosadakarya Nurhalda, 2007. 8. Hamalik. <i>Pendidikan Guru, Berdasarkan Pendekatan Kompetensi, Cetakan V</i>. Jakarta: PT. Bumi Aksara, 2008.
Date of last amendment made	January 9 th , 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150952
Subtitle, if applicable	-
Course, if applicable	Construction Management
Semester(s) in which the module is taught	VI
Person responsible for the module	Lecturer of the course
Lecturer	Lenggogeni, ST., MT.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to able to investigate the construction process based on applicable rules and construction management concepts and offered in the 5 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Project-based Learning The course meets 35 contact hours for lecture, 42 contact hours for assignment, and 42 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Budget Plan course

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the basics of managements and create construction project scheduling; • Able to create organizational structures for construction projects and make a plan curve S; • Able to explain methods in project control.
<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Students are able to understand the basics of management; - Students are able to create organizational structures for construction projects; - Students are able to understand the making of construction project scheduling; - Students are able to make a plan curve S; - Students are able to understand project control methods.
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>

<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times would be considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts; - If students arrive more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance; - If students arrive more than 30 minutes late, they are not allowed to attend lectures; - Assignments are submitted on time as agreed. Default in submitting on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam; - Students who do not submit major assignments will be declared not to have passed this course; <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn. <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students are not allowed to make any noises that might disturb the order of learning; - Questions and answers that take place during learning must be carried out in a good manners and ethics; - Mutual respect among fellow students must be implemented. <p>Form of examination: Written exam: Essay</p>
<p>Media employed</p>	<p>Laptop, LCD / Projector</p>

Reading list	<ol style="list-style-type: none"> 1. Asiyanto. <i>Project Cost Control</i>. Erlangga, Jakarta, 2006. 2. Callahan, Michael T. et.al. <i>Construction Project Scheduling</i>. McGraw Hill, New York, 1992. 3. Barry, Donald S., and Paulson. <i>Manajemen Proyek Profesional</i>. Erlangga, Jakarta, 1998. 4. Dipohusodo, Istimawan. <i>Manajemen Proyek</i>. Erlangga, Jakarta, 1996. 5. Halpin, Daniel and Woodstock, <i>Construction Management</i>, John Wiley, 1998. 6. Soeharto, Iman. <i>Manajemen Proyek, Dari Konseptual Hingga Operasional</i>. Erlangga, Jakarta, 1998. 7. PMBOK 2008
Date of last amendment made	January 9 th , 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150512
Subtitle, if applicable	-
Course, if applicable	Health Techniques
Semester(s) in which the module is taught	VI
Person responsible for the module	Lecturer of the course
Lecturer	Prof. Dr. Henita Rahmayanti, M.Si
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to analyze phenomena in the field of building construction with the basic principles of natural science and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Student Active Learning The course meets 23 contact hours for lecture, 28 contact hours for structured assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture, - 28 hours for structured assignments, - 28 hours for private study,
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education

	<p>Intended Learning Outcomes</p> <p>General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain their learning in the condition, treatment, and distribution of clean water; • Able to explain their learning in the variety and its treatment of waste water.
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Content	<p>Students will learn about:</p> <p>Provision of clean water, environmental health, waste water, waste water treatment.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the total number of meetings (see university academic rules); - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class; - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the student is considered absent; - Students who do not take the exam or do not submit assignments without notice will be given a D on the exam/assignment; - There should be no plagiarism and other forms of violation of norms; - During the lecture, cellphones are required to be turned off or being set on silent; - Students should ask for permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Respect each other and do not make any noises/disruptions/damages in class; - Students should wear neat and polite clothes during lectures, and in accordance with the rules; - Students are not allowed to wear clothes that show their genitalia

	(tight/transparent). Form of examination: Written exam: Essay
Media employed	Computer/Laptop, Google Classroom
Reading list	<ol style="list-style-type: none"> 1. Azwar, Azrul. <i>Pengantar Ilmu Kesehatan Lingkungan</i>, Jakarta Mutiara Sumber Widya. 1987 2. Davis Mackenzie L & Cornwell, david A, 1991. <i>Introduction to Environmental Engineering</i>. Mc. Graw Hill Inc. Second edition. New York 3. Ehler, V M. 1985. <i>Municipal and Rural sanitation</i>. Mc. Graw Hill. New York 4. Hartanto, <i>Menjernihkan Air</i>. Angkara Bandung, 1990 5. <i>Lingkungan Hidup Kita</i>. Jakarta. Kantor Menteri Lingkungan Hidup, Depkimpraswil, Depdiknas, JICA, 2002 6. Mulyana, Rachmat. <i>Penentuan Type Konstruksi Sumur resapan Air</i>, 1998 7. Notoatmodjo, Soekidjo. <i>Ilmu Kesehatan Lingkungan</i>. Jakarta : Rineka Cipta, 1977 8. SNI 19-3242-1994. <i>Tata Cara Pengelolaan Sampah Pemukiman</i>. Jakarta : Badan Standarisasi Nasional 9. Sukarni, Maryati. <i>Kesehatan Keluarga dan Lingkungan</i>. Yogyakarta, Kanisius. 2000 10. Totok Sutrisno. <i>Teknologi Penyediaan Air Bersih</i>. Jakarta : Bina Aksara. 1991
Date of last amendment made	January 9 th , 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150732
Subtitle, if applicable	-
Course, if applicable	Foundation Engineering 2
Semester(s) in which the module is taught	VI
Person responsible for the module	Lecturer of the course
Lecturer	Tri Mulyono, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to design building engineering based on existing materials and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Inquiry-Based Learning/Project-based Learning (PBL). The course meets 35 contact hours for lecture, 42 contact hours for assignment, and 42 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Engineering Mechanics 1, Engineering Mechanics 2, Engineering Mechanics 3

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes</p> <p>Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain types of deep foundation, such as piles, wood, concrete, steel, bored pile; Cone Penetration Test (CPT) or sondir; Data Standard Penetration Test (SPT) for deep foundation designs; Ultimate Bearing Capacity for Deep Foundation; Settlement in single pile foundation; Static Loading Test (SLT) –SLT test results for design data in pile bearing capacity; Piles–Dynamic analysis; Equipment for driving; as well as Pile Driving Formula • Able to analyze Single piles – Static Capacity Analysis on both End/Based Bearing and Skin/Friction resistance; Pile group bearing capacity; Pile group vertical load; Pile group efficiency; Soil Pressure; Pile group settlement; Pile caps; Batter piles; Negative skin friction; Pile group lateral force; Pile group matrix analysis; Pile caps planning with computer; As well as Ultimate Bearing Capacity–Dynamic Analysis; • Able to calculate settlement on single pile foundation.
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Able to explain the types of deep foundations (types of deep foundations) such as piles, wood, concrete, steel and drill piles. - Able to explain Cone Penetration Test (CPT) or Sondir data and Standard Penetration Test (SPT) data for deep foundation design - Able to describe the Main Bearing Capacity for Deep Foundation - Able to analyze single pile – Static Capacity Analysis, both End/Based Bearing and Skin/Friction Resistance - Able to describe settlement on single pile foundation - Able to calculate settlement on single pile foundation - Able to analyze pile group bearing capacity, pile group vertical load, pile group efficiency, soil pressure, pile group settlement, pile cap, batter piles, negative skin friction, pile group lateral force, Pile Group Matrix Analysis and Pile Caps Planning Computer. - Able to explain the concept of static loading test (static loading test) - Able to interpret SLT test results for pile bearing capacity design data. - Able to explain Dynamic Analysis of Masts and Equipment for Driving and Mast Driving Formulas - Able to perform Ultimate Carrying Capacity Dynamic Analysis – Dynamic Analysis - Able to explain the planning of concrete pile foundations and reinforcement
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who do not attend, whether with notification or not for more than 20% of the total meeting are considered to not pass and get an E. <p>Lateness:</p> <ul style="list-style-type: none"> - Students are allowed for a few minutes late tolerance to class to attend the lecture, if class starts at 8 o'clock; - Students who are late for more than 1-15 minutes are not allowed to attend the lecture, if the class starts at 9 onwards; - Delay in the submission of assignments for 1-7 days from the specified deadline will result in a deduction of 20 points from a total of 1-100 points; - Late submission of assignments more than 7 days from the specified time limit will get a score of 0.

	<p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without notice will be given a D on the exam/assignment. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students must comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. The act of plagiarism and cheating in the exam will be given an E score on the exam. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear clothes that show genitalia (tight/transparent); - Students are not allowed to use communication tools for purposes that are not related to learning; - Students are not allowed to make noises that disturb the order of learning; - Students who want to ask questions should raise their hand for permission before asking the lecturer. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD / Projector
Reading list	<ol style="list-style-type: none"> 1. ACI Committee 318. <i>“Building Code Requirements for Structural Concrete.”</i> American Concrete Institute, 2014, doi:10.1016/0262-5075(85)90032-6. 2. Bowles, J. E. <i>Foundation Analysis and Design.</i> The McGraw-Hill Companies, Inc., 1990. 3. Budhu, M. <i>Soil Mechanics and Foundations.</i> Third, Jhon Wiley & Sons, 2011. 4. Das, Braja M. <i>“Principles of Foundation Engineering.”</i> Cengage Learning, Eighth, Cengage Learning, 2016. 5. Fang, H. Y. <i>Foundation Engineering Handbook.</i> Second, Chapman & Hall, 1991. 6. FPS. <i>Handbook on Pile Load Testing.</i> Federation of Piling Specialists, 2006. 7. Mulyono, Tri. <i>Teknik Pondasi 2.</i> Fakultas Teknik, Universitas Negeri Jakarta, 2015. 8. Peck, R. B., et al. <i>Foundation Engineering.</i> Second, Jhon Wiley & Sons, 1974. 9. Prakash, S., and H. D. Sharma. <i>Pile Foundations in Engineering Practice.</i> Jhon Wiley & Sons, 1990.

	<p>10. Rao, N. S. <i>Foundation Design: Theory and Practice</i>. John Wiley & Sons, 2011.</p> <p>11. Ryul, Kim Sung, et al. “Design for Settlement of Pile Groups by the Unified Design Method: A Case History.” <i>Full Scale Testing in Foundation Design</i>, edited by M.H Hussein et al., ASCE GeoIn, ASCE, 2012, pp. 545–67, doi:10.1061/9780784412084.0039.</p> <p>12. SNI 2827:2008. <i>Cara Uji Penetrasi Lapangan Dengan Alat Sondir</i>. Badan Standardisasi Nasional, 2008.</p> <p>13. SNI 2847:2019. “Persyaratan Beton Struktural Untuk Bangunan Gedung Dan Penjelasan (ACI 318M-14 Dan ACI 318RM-14, MOD).” <i>Badan Standardisasi Nasional</i>, Badan Standardisasi Nasional, 2019.</p> <p>14. SNI 4153:2008. <i>Cara Uji Penetrasi Lapangan Dengan SPT</i>. Badan Standardisasi Nasional, 2008.</p> <p>15. SNI 6371:2015. <i>Tata Cara Pengklasifikasian Tanah Untuk Keperluan Teknik Dengan Sistem Klasifikasi Unifikasi Tanah (ASTM D 2487-06, MOD)</i>. Badan Standardisasi Nasional, 2015.</p> <p>16. Tomlinson, M. J., and J. C. Woodward. <i>Pile Design and Construction Practice</i>. Sixth, CRC Press LLC, 2015.</p> <p>17. Viggiani, C., et al. <i>Piles and Pile Foundations</i>. Spon Press is an imprint of the Taylor & Francis Group, 2012.</p>
Date of last amendment made	January 9 th , 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150472
Subtitle, if applicable	-
Course, if applicable	Hydraulics
Semester(s) in which the module is taught	6
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Arris Maluana , ST, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to solve problems related to building engineering and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: Teacher Center Learning - Teaching Center Learning This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Hydrology
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology Intended Learning Outcomes Special Competence (SC1):

	<p>Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to implement basic principles of duct design; • Able to design urban duct design; • Able to implement hydraulic model design concept.
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Content	<p>Students will learn about: The basic principle of proper flow of water, Correctly calculate hydraulic parameters, Demonstrate the relationship of conservation laws in the field of open channel hydraulics, correctly calculate critical flow in a channel cross section, describe the basic principles and equations of uniform flow, properly design simple cross sectional channels, design the water level profile of slowly changing flow, designing the water level profile of the sudden change of flow, calculating the water jump in the case of an open channel, planning a hydraulic model based on various channel dimensions precisely</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students should attend face-to-face lectures at least 80% of the total number of meetings; - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class; - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the student is considered absent; - Students who do not take the exam or do not submit assignments without notice will be given a D on the exam/assignment; - There should be no plagiarism and other forms of violation of

	<p>norms;</p> <ul style="list-style-type: none"> - During the lecture, cellphones are required to be turned off or being set on silent; - Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Students should respect each other and do not make any noises/disruptions/damages in class; - Students should wear neat and polite clothes during lectures, and in accordance with the rules; - Students are not allowed to wear clothes that show their genitalia (tight/transparent); - Students are required to present their identity in the form of writings, images, or videos. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop/Computer, LMS, Zoom, Google Classroom, Google Meet
Reading list	<ol style="list-style-type: none"> 1. Chow, Ven Te, alih bahasa EV Nensi Rosalia, 1989, Hidrolika Saluran Terbuka, Erlangga, Jakarta 2. Karnisah, Iin, 2010, Aliran Dalam Saluran Terbuka, KBK Sumber Daya Air Jurusan Teknik Sipil, Politeknik Negeri Bandung. 3. Kodoatie, J.R., 2009, Hidrolika Terapan Aliran pada Saluran Terbuka dan Pipa, Andi Publisher, Yogyakarta. 4. Maryono, Agus, 2007, Hidrolika Terapan, Pradnya Paramita, Jakarta. 5. Triatmodjo, Bambang, 2008, Hidrolika I, Beta Offset, Yogyakarta. 6. Triatmodjo, Bambang, 2008c, Hidrolika II, Beta Offset, Yogyakarta. 7. Suripin, 2019, Mekanika Fluida dan Hidrolika Saluran Terbuka untuk Teknik Sipil, ANDI, Yogyakarta
Date of last amendment made	January 9 th , 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151362
Subtitle, if applicable	-
Course, if applicable	Interior Design
Semester(s) in which the module is taught	6
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Rosmawita Saleh, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course to be able to combine scientific concepts in the field of building construction and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Student Active Learning This course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education Intended Learning Outcomes

	<p>General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain design principles and aspects of residential interior designs; • Able to explain aspects of general building designs and interior furniture standards.
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Content	<p>Students will learn about: Design principles, aspects of residential interior design, aspects of general building design and interior furniture standards</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: attitude: 5%; knowledge : 80%; general skills : 10%; special skills: 5%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students Attend face-to-face lectures at least 80% of the ideal number of meetings; - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class; - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the student is considered absent; - Students who do not take the exam or do not submit assignments without notice will be given a D on the exam/assignment; - There should be no plagiarism and other forms of violation of norms; - During the lecture, cellphones are required to be turned off or being set on silent; - Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Respect each other and do not make any noises/disruptions/damages in class; - Students should wear neat and polite clothes during lectures, and in accordance with the rules; - Students are not allowed to wear clothes that show their genitalia (tight/transparent); - Students are required to present their identity in the form of writings, images, or videos.

	Form of examination: Written exam: Essay
Media employed	Laptop, Google Classroom and Google Meet
Reading list	<ol style="list-style-type: none"> 1. Heinz Frick dan Pujo L Setiawan. 2007. <i>Ilmu Konstruksi Perlengkapan dan Utilitas Bangunan ; Cara Perlengkapan Gedung Ilmu Konstruksi Bangunan 2. Edisi kedua</i>. Semarang: Kanisius. 2. Heinz Frick dan FX. Bambang Suskiyanto. 2007. <i>Dasar-dasar Arsitektur Ekologis; Konsep Pembangunan Berkelanjutan dan Ramah Lingkungan. Edisi pertama</i>. Semarang: Kanisius. 3. D.K. Ching. 2003. <i>Design Interior Illustrated</i>. Kanada: Van Nostrand Reinhold Company 4. Julius Panero.1995. <i>Interior Graphic and Design Standard</i>. Maxmillan Publishing Company, New York. 5. Eko Nurmianto.2003. <i>Ergonomi, Konsep Dasar dan Aplikasinya</i>.Surabaya: Penerbit Guna Widya 6. Mill, Edward D. 1976. <i>Planning</i>, London: Newness-Butterworth 7. Marry G. Wealle. 1987. <i>Environmental Interior</i>. Maxmillan Publishing Company. 8. Wikenning, Fritz. 1990. <i>Tata Ruang</i>. Semarang: Penerbit Kanisius. 9. Cindy Coleman. 2001. <i>Interior Design Handbook of Professional Practice</i>. New York: McGraw-Hill.
Date of last amendment	January 9 th , 2017

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151472
Subtitle, if applicable	-
Course, if applicable	Building Maintenance
Semester(s) in which the module is taught	VI
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Prihantono, S.T., M.Eng.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course to be able to combine scientific concepts in the field of building construction and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Case-based Learning/Project-based learning The course meets 23 contact hours for lecture, 28 contact hours for assignment, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 4: Able to apply basic science that supports expertise in the field of building engineering education

	<p>Intended Learning Outcomes</p> <p>General Competence (GC1): Able to apply basic knowledge of mathematics and physics in the concept of engineering mechanics to support the learning process</p> <p>General Competence (GC2): Able to apply science supporting building construction related to infrastructure, both physically and its impact on the environment, to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain basic concepts of building maintenance and treatment; • Able to explain the guidelines and methods in building maintenance and treatment.
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<p>Content</p>	<p>Students will learn about: Building Maintenance Management; Management of Building Maintenance of Structural and Architectural Components; Reinforcement in Concrete Buildings; Maintenance Guidelines For Concrete Buildings; Damage That Occurs and Its Treatment; Maintenance Program on Building Structures; Maintenance Program on Building Architecture</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Attendance:</p> <ul style="list-style-type: none"> - Students should meet up the attendance in face-to-face classes at least 80% of the total number of meetings (see university academic rules); - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class. <p>Lateness:</p> <ul style="list-style-type: none"> - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the person concerned can still attend the class but the attendance list is given an alpha value. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take exams or do not submit assignments without notification will be given a D on the exam/assignment.

	<p>Academic fraud:</p> <ul style="list-style-type: none"> - There should be no plagiarism and other forms of violation of norms. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students should ask permission (by raising their hand) if a student want to talk, ask questions, answer, leave class or other purposes; - Every student must be active and participative in class; - During the class, cellphones are required to be turned off or being set on silent; - Respect each other and do not make any noises, disturbances or damages in the classroom. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students should wear polite and neat clothes (shirts) and are not allowed to wear t-shirts and are recommended to be in a conducive place; - Students are required to present their identity in the form of writings, images, or videos; - Every student must be active and participative in class while still paying attention to ethics and orderliness in online classes; - During the class, cellphones are required to be turned off or being set on silent; - Students should ask for permission (by activating the raise hand or unmute voice feature) if they want to talk, ask questions, answer, leave class or other needs; - Students should be orderly and do not activate the sound (unmute), when the lecturer explains the material. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, Projector
Reading list	<ol style="list-style-type: none"> 1. Bahan Penataran IKIP Padang. 2. Depdikbud. <i>Teori & Praktek Ukur Tanah Jilid I & II</i>. 3. Depdikbud. <i>Latihan Praktek Ukur Tanah dan Pemetaan</i>. 4. Heinz, Frick. <i>Ilmu dan Alat Ukur Tanah</i>. Jogjakarta: Kanisius, 1985. 5. Mansur, Muhamadi. <i>Ilmu Ukur Tanah I</i>. ITS Surabaya. 6. Moffit, H. Francis dan Horry Bouchard. <i>Surveying</i>. Harver & Rawab. 7. PT. Jaya Konstruksi. <i>Teknik Pengukuran</i>.

	8. Sutomo, Wongso Citro. <i>Ilmu Ukur Tanah</i> . Jogjakarta: Kanisius, 1980. 9. Zulfahmi, Amir. <i>Surveying</i> . Padang: Andalas, 1988.
Date of last amendment made	January 9 th , 2017

Semester 7

List of Courses:

- 01** Urban Drainage
- 02** Plumbing Theory and Practice
- 03** Construction Management Application
- 04** Learning Strategies and Media
- 05** Vocational Education Management
- 06** Earthquake Engineering

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54150472
Subtitle, if applicable	-
Course, if applicable	Urban Drainage
Semester(s) in which the module is taught	7
Person responsible for the module	Lecturer of the course
Lecturer	Drs. Arris Maluana , S.T, M.T
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to solve problems related to building engineering and offered in the 7 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Teacher Center Learning This course meets 23 contact hours for lecture, 28 contact hours for structured assignments, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Hydrology and Hydraulics
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology Intended Learning Outcomes Special Competence (SC1):

	<p>Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain the basic concepts of drainage; • Able to implement basic urban sewer system planning.
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Content	<p>Students will learn about: Theoretical concepts and be able to apply comprehensive and integrated planning on urban drainage.</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students should attend face-to-face lectures at least 80% of the ideal number of meetings; - Students should be present in class on time according to the time set/agreed; - There should be a notification if there are any students who do not attend the face-to-face class; - Students are being given a 10 minutes delay tolerance. If the tolerance time limit is exceeded, the student is considered absent; - Students who do not take the exam or do not submit assignments without notice will be awarded a D on the exam/assignment; - There should be no plagiarism and other forms of violation of norms; - During the class, cellphones are required to be turned off or being set on silent; - Students should ask permission (by raising their hand) if they want to talk, ask questions, answer, leave class or other purposes; - Students should respect each other and do not make any noises, disturbances or damages in the classroom; - Students should wear neat and polite clothes during lectures, and

	<p>in accordance with the rules;</p> <ul style="list-style-type: none"> - Students are not allowed to wear clothes that show their genitalia (tight/transparent); - Students are required to present their identity in the form of writings, images, or videos. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop/Computer, LMS, <i>Zoom</i> , <i>Google Classroom</i> , <i>Google Meet</i>
Reading list	<ol style="list-style-type: none"> 1. Syarifudin. 2017. <i>Drainase Perkotaan Berwawasan Lingkungan</i>. Yogyakarta: Penerbit ANDI 2. Saidah Humairoh. <i>Drainase Perkotaan</i>. Medan: Yayasan Kita Menulis 3. Harapan, Rumilia. dkk. <i>Drainase Pemukiman Prinsip Dasar dan Aplikasinya</i>. Medan+ Yayasan Kita Menulis
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151123
Subtitle, if applicable	-
Course, if applicable	Plumbing Theory and Practice
Semester(s) in which the module is taught	VII
Person responsible for the module	Lecturer of the course
Lecturer	M. Agphin Ramadhan, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a mandatory course to be able to operate building engineering software and offered in the 7 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Student Active Learning The course meets 35 contact hours for lecture.
Workload	For this course, students are required to meet a minimum of 152 hours in one semester, which consist of: - 17 hours for lecture; - 51 hours for practice; - 42 hours for structured assignments; - 42 hours for private study.
Credit points	3 credit points (equivalent with 4.5 ECTS)
Requirements according to the examination regulations	Students must attend all classes, carry out all practical and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards

	<p>Intended Learning Outcomes</p> <p>Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process</p> <p>Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education</p> <p>Special Competence (SC3): Able to practice jobs in the field of building engineering education using hardware</p> <p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education</p> <p>Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education</p> <p>Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to design plumbing installation planning in buildings; • Able to perform their skills in installing simple plumbing system.
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Content	Students will learn about: Plumbing installation theory in buildings, practice plumbing system installation simple
Forms of Assessment	Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%
Study and examination requirements and forms of examination	Study and examination requirements: <ul style="list-style-type: none"> - Students should attend face-to-face lectures at least 80% of the total number of meetings (see rules university academics); - Every student must be active and participative in lectures; - Attend the online class on time according to the time set/agreed; - The lecturer gives the students 20 minutes to fill out the online Attendance List. If any students cross the line at that time, they can attend lectures but are not recorded as presence; - Students should give a notification if they do not attend the online class;

	<ul style="list-style-type: none"> - During the teleconference, the camera is in the active position and the microphone is in the mute state unless the students ask for permission to talk; - Students should ask for permission (by raising their hand) if they want to talk, ask, answer, leave online classes or other purposes; - Students should respect each other and do not make any noise/disruption/damage in class; - There should be no plagiarism and other forms of violation of norms; - Students should wear neat and polite clothes during online lectures, and in accordance with rule. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD, Materials and Toola Required
Reading list	<ol style="list-style-type: none"> 1. Beta Suryokusumo S & Bambang Yatnawijaya S. 2018. <i>Dasar Perencanaan Plambing & Sistem Distribusi Air Bidang Arsitektur</i>. Malang: UB Press. 2. Daryanto. 2010. <i>Keterampilan Kejuruan Teknik Plambing (Masalah Instalasi Air Kotor)</i>. Bandung: Satu Nusa. 3. Dwi Tangoro. 2010. <i>Utilitas Bangunan</i>. Jakarta: UIP 4. Hartono Poerba. 2007. <i>Utilitas Bangunan, Buku Pintar untuk Mahasiswa Arsitektur-Sipil</i>. Jakarta: Djembatan 5. SNI 03-3989-2000 <i>Tata Cara Perencanaan dan Pemasangan Sprinkler Otomatik untuk Pencegahan Bahaya Kebakaran pada Bangunan Gedung</i>. 6. SNI 8153:2015 <i>Sistem Plambing pada Bangunan Gedung</i>. 7. Soufyan Moh. Noerbambang & Takeo Morimura. 2000. <i>Perancangan dan Pemeliharaan Sistem Plambing</i>. Jakarta : PT Pradnya Paramita. 8. Steele, Alfred; Laws, A. Calvin. 2004. <i>Engineered Plumbing Design II</i>. Chicago: ASPE 9. Sunarno, 2005. <i>Mekanikal Elektrikal</i>. Yogyakarta: ANDI. 10. Sunarno, 2006. <i>Mekanikal Elektrikal Lanjutan</i>. Yogyakarta: ANDI. 11. Theresia Pynkyawati & Shirley Wahadamaputera . 2015 . <i>Utilitas Bangunan Modul Plumbing</i>. Jakarta: Griya Kreasi. 12. Water Supplies Department. 2001. <i>Handbook on Plumbing Installation for Buildings</i>. Hongkong: HKSARG
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151602
Subtitle, if applicable	-
Course, if applicable	Construction Management Application
Semester(s) in which the module is taught	VII
Person responsible for the module	Lecturer of the course
Lecturer	Anisah, MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course to be able to operate building engineering software and offered in the 7 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Project Based Learning The course meets 35 contact hours for lecture, 42 contact hours for assignment, and 42 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Students must pass Construction management course.
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 7: Able to carry out building engineering practices in laboratories and workshops by applying the established standards Intended Learning Outcomes

	<p>Special Competence (SC3): Able to practice jobs in the field of building engineering education using hardware</p> <p>Special Competence (SC4): Able to operate software related to job analysis in the field of building engineering education</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to prepare project planning; • Able to control project costs; • Able to make project reports.
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Content	<p>Students will learn about: Able to prepare project planning, Able to control project costs, and Able to make project reports</p>
Forms of Assessment	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <p>Attendance:</p> <ul style="list-style-type: none"> - Students who are not present at the lecture more than 3 times will be considered to have resigned. <p>Lateness:</p> <ul style="list-style-type: none"> - Students must be in class no later than 15 minutes after the class schedule starts; - If students arrive for more than 15 minutes late, they are allowed to enter the class to attend lectures, but are not included in the attendance; - If students arrive for more than 30 minutes late, they are not allowed to attend lectures; - Assignments are submitted on time as agreed. Default in submitting on time will be considered as not submitting assignments. <p>Not attending/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the UTS/UAS without a medical certificate from a doctor or a certificate from their parents will not be allowed to receive a follow-up exam; - Students who do not submit major assignments will be declared not to have passed this course. <p>Academic cheating:</p> <ul style="list-style-type: none"> - Students are required to comply with standard rules and policies

	<p>regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be removed from the class list and considered withdrawn.</p> <p>Ethics in the classroom is courageous:</p> <ul style="list-style-type: none"> - Students must dress cleanly, neatly, and politely, and wear shoes; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students are not allowed to make any noises that might disturb the order of learning; - Questions and answers that take place during learning must be carried out in a good manners and ethics; - Mutual respect among fellow students. <p>Form of examination: Written exam: Essay</p>
Media employed	Laptop, LCD / Projector
Reading list	<ol style="list-style-type: none"> 1. Paul E. Harris, 2007 <i>Planning Using Ms Project Revised 2006</i> ISBN: 1921059133, ISBN-13: 9781921059131, Eastwood Harris Pty Ltd. 2. Ursula Kuehn, 2006, <i>Integrated Cost and Schedule Control in Project Management</i>, ISBN: 1567261701, ISBN-13: 9781567261707, Eastwood Harris Pty Ltd. 3. Gregory T. Haugan, 2001, <i>Effective Work Breakdown Structures (The Project Management Essential Ibrary Series)</i>, ISBN: 1567261353, ISBN-13: 9781567261356, Eastwood Harris Pty Ltd. 4. Parviz F. Rad, 2001, <i>Project Estimating and Cost Management (Project Management Essential Library)</i>, ISBN: 1567261442, ISBN-13: 9781567261448, Eastwood Harris Pty Ltd. 5. Leslie Feigenbaum, 2001, <i>Construction Scheduling with Microsoft Project (2nd Edition)</i>, ISBN: 0130922013, ISBN-13: 9780130922014, Eastwood Harris Pty Ltd. 6. Paul E. Harris, 2005, <i>Planning Using Primavera SureTrak Project Manager, Version 3.0</i>, Revised 2004 Edition with Updated Workshops, ISBN: 0975150308, ISBN-13: 9780975150306, Eastwood Harris Pty.
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	5415-154-2
Subtitle, if applicable	-
Course, if applicable	Learning Strategies and Media
Semester(s) in which the module is taught	VII
Person responsible for the module	Lecturer of the course
Lecturer	Dr. Riyan Arthur, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course to be able to design learning supported by research technology and offered in the 7 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Cooperative learning model and adult learning (andragogy). The course meets 23 contact hours for lecture, 28 contact hours for structured assignments, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes</p> <p>PLO 1:</p> <p>Able to apply the discipline of pedagogy, namely by planning, implementing, and evaluating learning programs in building engineering education</p> <p>Intended Learning Outcomes</p> <p>Knowledge (K1):</p> <p>Able to apply learning and learning theory according to the age development of vocational students based on the foundation of Indonesian education</p> <p>Knowledge (K2):</p> <p>Able to implement the planning, implementation, and evaluation of learning in the SMK Building Engineering by vocational education management</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to determine approaches, strategies, models, and learning methods that are in accordance with character of learning in vocational education; • Able to design online learning concepts, supporting content, and learning syntax (scenarios) appropriate with character of learning in vocational education; • Able to design learning media (Audio/Visual/Audio Visual/Multimedia/Animation) appropriate to characteristics of learning material in vocational education.
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<p>Content</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> - Understanding the Meaning of Approaches, Strategies & Learning Methods in Vocational Education/ Vocational High School - Determining Approaches, Strategies, Models & Learning Methods that are in accordance with the character of learning in Vocational Education - Analyzing the concept of online learning and supporting content in Vocational education - Designing learning syntax (scenarios) in accordance with the characteristics of subjects/lectures (learning scenarios) for vocational education - Identify the role, function, type, classification & characteristics of learning media - Designing learning media (Audio/Visual/Audio Visual/Multimedia/Animation) according to the characteristics of learning materials in Vocational Education - Making Learning Videos according to the characteristics of
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	learning materials in Vocational Education
Forms of Assessment	Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%.
Study and examination requirements and forms of examination	<p>Attendance:</p> <ul style="list-style-type: none"> - Students who do not attend, regardless with notification or not for more than 20% of the total meetings held do not pass and get an E. (does not meet the administrative requirements based on the rector's regulation). <p>Lateness:</p> <ul style="list-style-type: none"> - 20 minutes delay tolerance is given to join the meeting if class starts at 08:00 am; - Being late for class more than 15 minutes is not tolerated to attend the meeting if the class starts at 10.00 and above; - Delay in submitting assignments for 1-3 days from the specified deadline will result in a reduction of 20 points (from a score range of 0-100 points); - Late submission of assignments more than 3 days from the set time limit is considered not submitting assignments. <p>Not taking exams/not submitting assignments:</p> <ul style="list-style-type: none"> - Students who do not take the exam or do not submit assignments will be given a score of 0 (on the exam/assignment). <p>Academic fraud:</p> <ul style="list-style-type: none"> - Students must comply with standard rules and policies regarding academic honesty and avoid plagiarism and cheating in exams. Acts of plagiarism and cheating in the exam will be given an E in the Learning Strategies and Media course. <p>Ethics in offline classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight clothes so that their curves/body shape is clearly visible; - Students are not allowed to wear transparent clothing; - Students are not allowed to wear sandals, torn pants/shirts & dirty clothes; - Students are not allowed to use communication tools for purposes that are not related to learning; - Students are not allowed to make any noises that disturbs the order of learning. <p>Ethics in online classes:</p> <ul style="list-style-type: none"> - Students are not allowed to wear tight clothes that show their curves/body shape;

	<ul style="list-style-type: none"> - Students are not allowed to wear transparent clothing; - Students are required to present their identity in the form of writings, images, or videos; - Students are required to turn on the camera (ON CAM) during the lecture; - Students are not allowed to make any noises that might disturb the order of learning (mute the microphone & turn on the microphone if invited). <p>Form of examination: Written exam: Essay</p>
Media employed	Computer/Laptop/Smartphone; Teaching materials (textbooks/ ebooks, modules/ e-modules); Learning Videos (Tutorials); Related Journal Articles/Proceedings; <i>LMS onlinelearning.unj.ac.id</i> ; Zoom/ Google Meet/ Microsoft Teams; Ms. Office; Mendeley; 4. Da Vinci Resolve/ Adobe Premiere; Turnitin
Reading list	<ol style="list-style-type: none"> 1. Arsyad, A. (2007). <i>Media Pembelajaran</i>. Jakarta: Raja Grafindo. 2. Gagne, R. M., & Briggs, L. J. (1979). <i>Principles of Instructional Design</i>. New York: Holt, Rinehart and Winston. 3. Gagne, R. M., Wager, W. W., Golas, K. W., & Keller, J. M. (2005). <i>Principles of Instructional Design</i>. Belmont: Thomson Wadsworth. 4. Ibrahim, R., & Syaodih, N. (2010). <i>Perencanaan Pengajaran</i>. Jakarta: Rineka Cipta. 5. Iru, L., & Arihi, L. O. (2012). <i>Analisis Penerapan Pendekatan Metode, Strategi dan Model-Model Pembelajaran</i>. Yogyakarta: Multi Presindo. 6. Johnson, E. B. (2010). <i>Contextual Teaching & Learning</i>. Bandung: Kaifa. 7. Joyce, B., Weil, M., & Calhoun, E. (2009). <i>Models of Teaching</i>. Boston: Pearson. 8. Kozulin, A., Gindis, B., Agueyev, V. S., & Miller, S. M. (2007). <i>Vygotsky's Educational Theory in Cultural Context</i>. New York: Cambridge University Press. 9. Lee, W. W., & Owens, D. L. (2004). <i>Multimedia-Based Instructional Design</i>. San Francisco: John Wiley & Sons Inc. 10. Majid, A. (2011). <i>Perencanaan Pembelajaran</i>. Bandung: Remaja Rosdakarya. 11. Marzano, R. J., & Kendall, J. S. (2007). <i>Taxonomy of Educational Objectives</i>. California: Sage Publications Company. 12. Newby, T. J., Stepich, D. A., Lehman, J. D., Rusell, J. D., & Leftwich, A. O. (2011). <i>Educational Technology for Teaching and Learning</i>. Boston: Pearson.

13. Prawiradilaga, D. S., & Siregar, E. (2008). *Mozaik Teknologi Pendidikan*. Jakarta: Kencana Prenada Media.
14. Roblyer, M. D., & Doering, A. H. (2010). *Integrating Educational Technology into Teaching*. Boston: Pearson.
15. Sani, R. A. (2014). *Pembelajaran Saintifik untuk Kurikulum 2013*. Jakarta: Bumi Aksara.
16. Sanjaya, W. (2009). *Kurikulum dan Pembelajaran*. Jakarta: Kencana Prenada Media Group.
17. Sharan, S. (2009). *Hanbook of Cooperative Learning*. Yogyakarta: Imperium.
18. Smaldino, S. E., Lowther, D. L., & Rusell, J. D. (2012). *Instructional Technology & Media for Learning*. Jakarta: Kencana Prenada Media Group.
19. Sudjana, N., & Rivai, A. (2005). *Media Pengajaran*. Bandung: Sinar Baru Algesindo.
20. Suparman, M. A. (2012). *Desain Instruksional Modern*. Jakarta: Erlangga.
21. Susilana, R., & Riyana, C. (2007). *Media Pembelajaran*. Bandung: Wacana Prima.
22. Trianto. (2009). *Mendesain Model Pembelajaran Inovatif Progresif*. Jakarta: Kencana Prenada Media Group.
23. Uno, H. B. (2014). *Model Pembelajaran*. Jakarta: Bumi Aksara.
24. Arianto, Agung, et al. "Hubungan Komunikasi Intruksional Dengan Hasil Belajar Ilmu Ukur Tanah Di SMK Negeri 1 Jakarta." *Jurnal Pensil*, vol. 8, no. 1, 2019, pp. 31–39, <http://journal.unj.ac.id/unj/index.php/jpensil/article/view/8481>.
25. Arthur, Riyan, Riza Nur Dwi, et al. "E-Module of Cost Estimating Course in Building Construction Vocational Undergraduate Program Faculty of Engineering Universitas Negeri Jakarta." *Jurnal Ilmu Pendidikan*, vol. 25, no. 2, 2020, p. 88, doi:10.17977/um048v25i2p88-96.
26. Arthur, Riyan. "Learning Approach of Problem Solving for Increase Learning Achievement of the Civil Engineering Evaluation Program." *American Journal of Educational Research*, vol. 3, no. 8, 2015, pp. 964–67, doi:10.12691/education-3-8-3.
27. Arthur, Riyan, Galih Tiara Sekartaji, et al. "Pengembangan Media Video Presentasi Pada Mata Kuliah Hidrologi Universitas Negeri Jakarta." *Kwangsan: Jurnal Teknologi Pendidikan*, vol. 07, no. 02, 2019, pp. 170–83, doi:10.31800/jtp.kw.v7n2.p170--183.
28. Atikahani, Virna, et al. "Pengembangan Media Flashcard Mata Kuliah Teknolgi Beton Di Program Studi Pendidikan Vokasional Konstruksi Bangunan Universitas Negeri Jakarta." *Jurnal PenSil*, vol. 7, no. 2, 2018, pp. 71–78, doi:10.21009/pensil.7.2.2.
29. Dewi, Nanda, et al. "Pengembangan Media Pembelajaran Interaktif Pada Mata Kuliah Teori Dan Praktik Plambing Di Program Studi SI PVKB UNJ." *Jurnal PenSil*, vol. 7, no. 2, 2018, pp. 25–34, doi:10.21009/pensil.7.2.6.
30. Mubarak, Abdul Azis, et al. "Pengembangan Pembelajaran E-Learning Mata Kuliah Ptm/Jalan Raya Pendidikan Vokasional

	<p><i>Konstruksi Bangunan Fakultas Teknik Universitas Negeri Jakarta.</i>” Jurnal PenSil, vol. 7, no. 2, 2018, pp. 87–94, doi:10.21009/pensil.7.2.5.</p> <p>31. Mustiani, Shinthia, et al. “<i>Penerapan Model Pembelajaran Kooperatif Tipe Think Pair Share (TPS) Untuk Meningkatkan Hasil Belajar Mekanika Teknik Siswa Kelas X TGB Di SMK Negeri 26 Jakarta.</i>” Jurnal PenSil, vol. 5, no. 2, 2016, pp. 78–87, doi:10.21009/jpensil.v5i2.7239.</p> <p>32. Rinaldi, Anggi Aris, et al. “<i>Penggunaan Media Pembelajaran Berbasis Audio Visual Untuk Mata Pelajaran Konstruksi Bangunan.</i>” Jurnal PenSil, vol. 6, no. 1, 2017, pp. 1–7, doi:10.21009/jpensil.v6i1.7231.</p> <p>33. Tampubolon, Michaelcui Albertus Wijaya, et al. “<i>Pengembangan E-Module Konstruksi Bangunan Pada Kompetensi Dasar Menerapkan Spesifikasi Dan Karakteristik Kayu.</i>” Jurnal PenSil, vol. 6, no. 2, 2017, pp. 75–82, doi:10.21009/jpensil.v6i2.7241.</p>
<p>Date of last amendment made</p>	<p>July 4th, 2016</p>

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151532
Subtitle, if applicable	-
Course, if applicable	Vocational Education Management
Semester(s) in which the module is taught	VII
Person responsible for the module	Lecturer of the course
Lecturer	M. Agphin Ramadhan, M.Pd
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course to be able to evaluate and provide recommendations on the vocational learning process based on the concept of measurement and offered in the 7 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: - Student Active Learning The course meets 23 contact hours for lecture, 28 contact hours for structured assignments, and 28 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course and given with this case: Program Learning Outcomes PLO 1: Able to apply the discipline of pedagogy, namely by planning, implementing, and evaluating learning programs in building engineering education Intended Learning Outcomes

	<p>Knowledge (K1): Able to apply learning and learning theory according to the age development of vocational students based on the foundation of Indonesian education</p> <p>Knowledge (K2): Able to implement the planning, implementation, and evaluation of learning in the SMK Building Engineering by vocational education management</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain management concept in vocational education based on 9 educational standards; • Able to analyze curriculum in vocational high school construction and property technology skills program; • Able to explain variety forms of cooperation, leadership, and latest issues in vocational education field.
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<p>Content</p>	<p>Students will learn about: The basic concepts of management, institutional organization, 2013 spectrum 2016 curriculum management, students, education staff, Sarpras, financing, leadership and supervision in vocational education. At the end of this course, all of the material is summarized through School-Based Management material and is realized in the form of a Strategic Plan (RENSTRA) for the vocational education unit.</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment: 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must attend face-to-face lectures at least 80% of the total number of meetings. Every student must be active and participative in lectures; - Lecturers and students arrive in class on time according to the time set/agreed; - There should be a notification given if there are any students who are not present in face-to-face lectures; - During the lecture, cellphones are required to be turned off or being set on silent; - Students should ask permission (by raising their hand) if a student want to talk, ask questions, answer, leave class or other needs; - Students should respect each other and do not make any noises/disruptions/damages in class; - There should be no plagiarism and other forms of violation of norms.

	Form of examination: Written exam: Essay
Media employed	Laptop, LCD, Whiteboard
Reading list	<ol style="list-style-type: none"> 1. Danim, S. (2006). <i>Visi Baru Manajemen Sekolah</i>. Bandung: Bumi Aksara. 2. Daulay, H. P. (2007). <i>Sejarah Pertumbuhan dan Pembaharuan Kurikulum</i>. Jakarta: Kencana. 3. Hasibuan, L. (2010). <i>Kurikulum dan Pemikiran Pendidikan</i>. Jakarta: Gaung persada. 4. Klikauer, T. (2017). <i>Management Education</i>. Cham: Springer International Publishing. 5. Mulder , M. (2017). <i>Competence- based Vocational and Professional Education</i>. Cham: Springer International Publishing. 6. Rusman. (2009). <i>Manajemen Kurikulum</i>. Jakarta: Raja Grafindo. 7. Sagala, S. (2004). <i>Manajemen Berbasis Sekolah dan Masyarakat: Strategi Memenangkan Persaingan Mutu</i>. Jakarta: Nimas Multima. 8. Saitis, C., & Saiti, A. (2018). <i>Initiation of Educators into Educational Management Secrets</i>. Cham: Springer International Publishing.
Date of last amendment made	July 4 th , 2016

Modul Description

Module name	Course Module
Module level, if applicable	Bachelor of Building Engineering Education
Code, if applicable	54151482
Subtitle, if applicable	-
Course, if applicable	Earthquake Engineering
Semester(s) in which the module is taught	VII
Person responsible for the module	Lecturer of the course
Lecturer	Ririt Aprilin S, M.Sc.Eng
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course to be able to identify data in the problem-solving process in the field of building engineering and offered in the 7 th semester.
Type of teaching, contact hours	Teaching methods used in this course are: Problem-based Learning. - Problem-based Learning This course meets 35 contact hours for lecture, 42 contact hours for assignment, and 42 contact hours for private study.
Workload	For this course, students are required to meet a minimum of 79 hours in one semester, which consist of: - 23 hours for lecture; - 28 hours for structured assignments; - 28 hours for private study.
Credit points	2 credit points (equivalent with 3 ECTS)
Requirements according to the examination regulations	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
Recommended prerequisites	Minimum passing structure course B

<p>Module objectives/intended learning outcomes</p>	<p>After completing the course and given with this case:</p> <p>Program Learning Outcomes PLO 6: Able to solve building engineering problems according to planning based on the latest science and technology</p> <p>Intended Learning Outcomes Special Competence (SC1): Able to apply the basic concepts of building design and construction by utilizing the latest technology to support the learning process Special Competence (SC2): Able to analyze building structures according to the materials used so that they can support expertise in the field of building engineering education Special Competence (SC5): Able to investigate the construction process based on applicable rules and construction management concepts according to the field of building engineering education Special Competence (SC6): Able to identify data and present it in the form of a comprehensive written report and present it to support the learning process</p> <p>Course Learning Outcomes</p> <ul style="list-style-type: none"> • Able to explain various topics in seismology; • Able to explain SDOF and equivalent statistics; • Able to explain earthquake resistant system.
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<p>Content</p>	<p>Students will learn about: Seismology, SDOF, Equivalent Statics, and Earthquake Resistant System</p>
<p>Forms of Assessment</p>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Participation: 20%, Assignment : 30%, Midterm Exam: 20%, Final Exam: 30%</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements: Collection of cases, assignments and exams: - Students should submit any cases, assignments, and exams on time. Delayed submissions will not be checked if students are late in the system.</p> <p>Cheating: - Students who cheat in exams will be given an E for the courses taken and must repeat in the following semester.</p>

	Form of examination: Written exam: Essay
Media employed	Computer / Laptop / Smartphone and Microsoft Teams
Reading list	1. Anil K Chopra, <i>Dynamics of Structure: Theory and Applications to Eartquake Engineering</i> , Prentice Hall: New Jersey, 1997. 2. SNI 03-1726-2019
Date of last amendment made	July 4 th , 2016