TEACHING PLAN

BACHELOR OF EDUCATION IN BUILDING ENGINEERING (BE-BE) STUDY PROGRAM

DEPARTMENT OF CIVIL ENGINEERING, FACULTY OF ENGINEERING, UNIVERSITAS NEGERI PADANG

COURSE	CODE	COURSE CLUSTER	CREDITS		SEM	VERSION
			Theory	Practice		
VOCATIONAL PEDAGOGY	**SIP1.61.5102**	**General Course Basic Education (GCBE)**	**3**	**0**	**5**	
Lecturer in Charge	Prof. Dr. M.Giatman, MSIE Dr. Nurhasan Syah, M.Pd Dr. Indriati KN., M.Pd		**Lecturer in Charge**			

Remarks	**Dean of Faculty of Engineering**	**Head of Civil Engineering Department**	**Coordinator of BEVE**
	Dr. Fahmi Rizal, M.Pd., M.T NIP. 195912041985031004	Faisal Ashar, Ph.D. NIP. 19750103 200312 1001	Drs. Revian Body, MSA. NIP. 19600103 198503 1003

Program Learning Outcomes

Program Learning Outcomes (PLO)

By considering input from all stake holders and the minimum requirements set by ASIIN, the PLO's that must be possessed by graduates from the Bachelor of Education in Building Engineering Study Program are determined as follows:

1. Master *basic knowledge of science* (mathematics, natural sciences) and other scientific disciplines that form the basis of building engineering vocational education field for carrying out professional work *(Knowledge and Understanding).*
   1.1. Able to implement basic concepts of mathematics and physics to master subjects matter in the field of building engineering vocational education.
   1.2. Mastering Statics, Mechanics, Statistics, Technology Materials, and Engineering Drawings as the basic knowledge in the field of building engineering vocational education.

2. Able to identify, formulate, solve, and evaluate various technical problems of buildings as the basic ability for teaching in the field of building engineering vocational education *(Engineering analysis, investigation and assessment)* .
    2.1. Able to identify, formulate, solve, and evaluate technical problems in the field of geotechnical and transportation as the basic ability for teaching in the field of building engineering vocational education.
    2.2. Able to identify, formulate, solve, and evaluate technical problems in the field of structure and construction management as the basic ability for teaching in the field of building engineering vocational education.
    2.3. Able to identify, formulate, solve, and evaluate technical problems in the field of hydrology as the basic ability for teaching in the field of building engineering vocational education.
3. Possess the ability to design building by taking into account environmental, social, health and work safety issues as the basis for teaching in the field of building engineering vocational education *(Engineering design)*.
    3.1. Able to make design programming by taking into account environmental, social, health and work safety issues, in cooperation with various party related.
    3.2. Able to analyze the design by taking into account environmental, social, health and work safety aspects.
    3.3. Able to produce design by taking into account environmental, social, health and work safety aspects.
4. Possess social, managerial, team work, and effective communication competencies, entrepreneurial character, environmental insight and life-long learning habits. *(Transferable and soft skills)*.
    4.1. Possess religious character implemented in personal and professional activities.
    4.2. Possess the spirit of nationalism, social sensitivity and environmental insight
    4.3. Able to communicate effectively and work in a team.
    4.4. Able to transfer science and technology to the community to improve the quality of life
    4.5. Possess entrepreneurial character
5. Possess the ability to innovate and adapt to the development of science and technology, and implement it into the learning process of building engineering vocational education field by taking into account non-technical risks that may occur (ethical, ecological, commercial, and industrial impact) *(Engineering practice)*.
    5.1. Able to innovate and use information technology (software) in the field of building engineering vocational education by taking into account the ethical, ecological, commercial and industrial impact.

5.2. Able to use information technology-based equipment (hardware) in field of building engineering vocational education.

6. Possess a good ability to design, implement and evaluate the learning process in the field of building engineering vocational education *(Educational design).*
   6.1. Able to design curriculum and learning process of building engineering vocational education.
   6.2. Able to implement, control, evaluate and improve the quality of learning process through research in the field of building engineering vocational education.
   6.3. Able to develop an effective, efficient, and attractive learning media in the field of building engineering vocational education.

Course Learning Outcomes

Course Learning Outcomes (CLO):Vocational Pedagogy

CLO	PLO
1. Students are able to design learning in the field of building engineering according to the learning standards in the 2013th curriculum.	4.1, 6.1
2. Students are able to make and implement learning preparations for certain subjects in accordance with K13 guidelines, both theoretical and practical lessons.	4.2. 6.2
3. Students are able to design and prepare learning assessments in accordance with the subjects taught by the K13 standard at Vocational High School.	4.3. 6.3

Course Description	This course provides knowledge about various principles and concepts of new educational paradigms, instructional design, strategies, methods and learning media, task analysis, concepts and analysis of CBC-based curriculum, formulating competencies, instructional analysis, compiling teaching plan, designing learning and learning evaluation, and preparing teaching materials.	
Literature	**Main:**	
	1. B.R. Hergenhahn, Matthew H.olson. 2998. Theories of Learning. Seven edition. Pearson Education Inc. Boston 2. Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., Wittrock, M.C. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives*. New York: Pearson, Allyn& Bacon	
	Supporting:	
	3. *Eggen P. and Kauchak D.2012. Strategie and Models for Teachers (Strategi dan Model Pembelajaran) terjemahan edisi 6. PT. Indek Jakarta* 4. *Atwi Suparman. 1995.* ***Desain Instruksional****. Jakarta: Pusat Antar Universitas* 5. Wilson, L. O. (2019). *Models of Teaching*. Retrieved Agustus 20, 2019, from The Second Principle: https://thesecondprinciple.com/teaching-essentials/models-of-teaching/ 6. Undang-UndangNomor 14 Tahun 2005 Tentang Guru Dan Dosen 7. Nwlink.com. (2015, January 12). *Bloom's Taxonomy of Learning Domains*. Retrieved Agustus 20, 2019, from www.nwlink.com: http://www.nwlink.com/~donclark/hrd/bloom.html	
Teaching Media	**Software:**	**Hardware:**
		Computer, LCD Projector and White Board
Team Teaching		
Assessment	Mid-Semester Exam, Final Exam, Individual and Group Assignment, Group Presentation	
Prerequisite	N/A	

TEACHING MATERIAL

Week	Expected Competency	Study Material	Teaching Method and Strategy	Assignment	Assessment Criteria/ Indicator	Reference
(1)	(PLO-1.1 LO4.1) Summarizes various concepts and principles A new paradigm in learning.	A new paradigm of learning Teacher competency standards according to the Teacher and Lecturer	Lecturer **[1x120']** Discussion **[1x60']** Assigment **[1x60']**	Studying, reviewing and discussing new paradigm concepts of learning.	*Analyze each item of teacher competence.*	RU-1 RP-3

Week	Expected Competency	Study Material	Teaching Method and Strategy	Assignment	Assessment Criteria/ Indicator	Reference
		Law No. 14 of 2005th Student centered instruction Learning how to learn.				
(2)	(PLO-1.2 LO4.1) Explain with examples the concepts and components of instructional design.	Concepts and Components of Instructional Design - Instructional Design Concepts - Components of Instructional Design	Presentation and Discussion **[1x180']** Assigment **[1x60']**	Studying, reviewing and discussing new paradigm concepts of learning	*Analyze every component of instructional design*	RU-1 RP-3, 4
(3)	(PLO-1.3 LO4.1) Summarize the various Learning Strategies, Methods, and Media.	Learning strategies and methods Learning strategies Learning methods Instructional Media	Presentation and Discussion **[1x180']** Assigment **[1x60']**	Studying, reviewing and discussing strategies, learning methods and learning media	*Analyze the differences between strategies, methods and use of instructional media*	RU-1 RP-3,4
(4)	(PLO-2.1 LO4.2) Determine the level of learning outcomes in the cognitive, affective, and psychomotor fields.	Taxonomy of Learning Outcomes Taxonomy Concept of Learning Outcomes Level of Learning Outcomes in the Cognitive, Affective, and Psychomotor Fields	Presentation and Discussion **[1x180']** Assigment **[1x60']**	Studying, reviewing and discussing learning of taxonomy	*Analyze the taxonomy components of learning*	RU-2 RP-3
(5)	(PLO-2.2 LO4.2)	*Task Analysis*	Presentation and	Studying, reviewing	*Analyze the*	RU-1,2

Week	Expected Competency	Study Material	Teaching Method and Strategy	Assignment	Assessment Criteria/ Indicator	Reference
	Carry out a job analysis in the vocational field.		Discussion **[1x180']** Assigment **[1x60']**	and discussing learning of task analisys	*components of the task analysis and their application*	RP-3
(6)	(PLO-2.3 LO4.1) Explain concepts and principles Competency-based curriculum (CBC).	CBC Concepts and Principles - KBK concept - Principles of CBC + K13	Presentation and Discussion **[1x180']** Assigment **[1x60']**	Studying, reviewing and discussing learning of curriculum CBK	*Analyze component of CBC*	RU-1,2 RP-3
(7)	(PLO-3.1 LO4.3) Formulate competency standards and sub competencies.	Competency standards and sub competencies - Concept of competence - Formulation of competencies	Presentation and Discussion **[1x180']** Assigment **[1x60']**	Studying, reviewing and discussing learning of competency standards and sub competencies	*Analyze competency standard and sub competencies*	RU-2 RP-3, 6
(8)	(PLO-2.4 LO4.2) Perform instructional analysis	Analysis instructional	Presentation and Discussion **[1x180']** Assigment **[1x60']**	Studying, reviewing and discussing learning of analysis instructional	*Analyze of analysis instructional*	RU-1 RP-3
(9)	**MID-Semester Exam**					
(10)	(PLO-2.5 LO4.2) Prepare teaching plan, lesson plans, and Jobsheets / Labsheet	Teaching plan. Jobsheet Labsheet	Assigment **[1x180']** Presentation **[1x60']**	Studying, reviewing and discussing learning of prepare teaching plan, lesson plan, jobsheet and labsheet	*Analyze components of teaching plan, lesson plan, jobsheet and labsheet*	RU-1 RP-3,6, 7
(11)	(PLO-3.2 LO4.3) Designing the Evaluation of Learning	Evaluation of learning outcomes Validity and reliability of	Assigment **[1x180']** Presentation **[1x60']**	Studying, reviewing and discussing learning of prepare	*Analyze components evaluation of*	RU-1 RP-3, 7

Week	Expected Competency	Study Material	Teaching Method and Strategy	Assignment	Assessment Criteria/ Indicator	Reference
	Outcomes	the test Essay test and objective test Assessment of the performance of the Porto-folio		evaluation learning	*learning outcomes*	
(12)	(PLO -3.3 LO 4.3) Writing teaching materials	Teaching materials Teaching Material Format Content of Teaching Materials	Assigment **[1x180']** Presentation **[1x60']**	Studying, reviewing and discussing learning of writing teaching materials	*Analyze of writing teaching materials*	RU-1 RP-3
(13)	(PLO -3.4 LO 4.2) Designing Individual Learning	Individual Learning Individual Manufacturing Components Individualized Content Creation	Presentation and Discussion **[1x180']** Assigment **[1x60']**	Studying, reviewing and discussing learning of designing individual learning	*Analyze of designing individual learning*	RU-1 RP-3
(14)	(PLO -3.5 LO 4.3) Writing modules	Modules Component of modules Writing modules	Assigment **[1x180']** Presentation **[1x60']**	Studying, reviewing and discussing learning of writing modules	*Analyze component modules*	RU-1 RP-3
(15)	(PLO -3.6 LO 4.2) Designing Structured Tasks	Structured Tasks Structured Task Form Structured Task Components	Assigment **[1x180']** Presentation **[1x60']**	Studying, reviewing and discussing learning of designing structured tasks	*Analyze component designing structured tasks*	RU-1 RP-3
(16)	(PLO -3.7LO4.3) Evaluation the learning	Evaluation of the learning process	Presentation and Discussion **[1x180']**	Studying, reviewing and discussing	*Analyze component of*	RU-1 RP-3

Week	Expected Competency	Study Material	Teaching Method and Strategy	Assignment	Assessment Criteria/ Indicator	Reference
	process	Teaching and learning process (TLP) Evaluation Concept TLP Evaluation Procedure TLP Evaluation Instruments	Assigment **[1x60']**	learning of evaluation the learning process	*evaluation the learning process*	
(17)	**Evaluation Final Semester (Evaluation which is intended to find the final achievement of student learning outcomes)**					

Notes:

Correlation between CLO, PLO and Assessment Methods

	Assesment	Weight (%)	PLO-1			PLO-2				PLO-3				PLO-4			PLO-5			PLO-6		
			1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3
CPMK-1.1																						
CPMK-1.2																						
CPMK-1.3																						
CPMK-2.1																						
CPMK-2.2	Task analisys	10																				
CPMK-2.3																						
CPMK-3.1																						
CPMK-2.4																						
UTS		25																				
CPMK-2.5	Task Teaching Plan	15																				
CPMK-3.2																						
CPMK-3.3																						
CPMK-3.4																						

CPMK-3.5	Task Write Modules	10																					
CPMK-3.6																							
CPMK-3.7																							
UAS		30																					
Presence		10																					
TOTAL		100																					

Assesment Components

Mid-Semester Exam :25%

Final Exam :30%

Assignment :35 %

Presence :10%

Total : 100 %

Description of Assessment Level

	Excellent	**Good**	**Satisfy**	**Fail**
Description	Able to describe correctly and completely	Able to describe correctly but incomplete	Able to describe but less clear and incomplete	Unable to describe
Formulation	Able to formulate correctly and completely	Able to formulate correctly but incomplete	Able to formulate but less clear and incomplete	Unable to formulate
Calculation	Able to calcutate correctly and completely	Able to calculate correctly but not complete	Able to count but less clear and incomplete	Unable to calculate
Analysis	Able to analyze correctly and completely	Able to analyze correctly but incomplete	Able to analyze but less clear and incomplete	Unable to analyze
Presentation	Able to present correctly and completely	Able to present correctly but incomplete	Able to present but less clear and incomplete	Unable to present

Assessment System

Score Range	Grade Letter	Grade Point	Notes	Score Range	Grade Letter	Grade Point	Notes
85 – 100	A	4.0	Exceptional	55 – 59	C	2.0	Quite Satisfactory
80 – 84	A-	3.6	Excellent	50 – 54	C-	1.6	Poor
75 – 79	B+	3.3	Very Good	40 – 49	D	1.0	Very Poor
70 – 74	B	3.0	Good	≤ 39	E	0.0	Fail
65 – 69	B-	2.6	Fairly Good	-	T	-	Delayed
60 – 64	C+	2.3	Satisfactory				

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS NEGERI PADANG
JURUSAN TEKNIK BANGUNAN
Alamat: Jl. Prof. Dr. Hamka, Kampus UNP Air Tawar, Padang 25131
Telp. (0751) 7055644, Fax (0751) 7055628, website: www.ft.unp.ac.id, e-mail: info@ft.unp.ac.id

MID SEMESTER EXAM

Course	:
Code / Credits	:
Type of Exam	:
Lecturer	:
Time Allocation	:
Maximum Grade	:

No	Question	Weight

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS NEGERI PADANG
JURUSAN TEKNIK BANGUNAN
Alamat: Jl. Prof. Dr. Hamka, Kampus UNP Air Tawar, Padang 25131
Telp. (0751) 7055644, Fax (0751) 7055628, website: www.ft.unp.ac.id, e-mail: info@ft.unp.ac.id

FINAL SEMESTER EXAM

Course	:
Code / Credits	:
Type of Exam	:
Lecturer	:
Time Allocation	:
Maximum Grade	:

No	Question	Weight

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS NEGERI PADANG
JURUSAN TEKNIK BANGUNAN
Alamat: Jl. Prof. Dr. Hamka, Kampus UNP Air Tawar, Padang 25131
Telp. (0751) 7055644, Fax (0751) 7055628, website: www.ft.unp.ac.id, e-mail: info@ft.unp.ac.id

Courses Assigments

Course	:
Code / Credits	:
Type or Task	:
Lecturer	:
Time Allocation	:
Score Grade	:

Group	Question	Max Grade