CURRICULUM OF CIVIL ENGINEERING

(Revised   27th, Sep, 2017)

1、Degree Title:
Bachelor of Engineering (Civil Engineering)

2、Objectives:
To impart state-of-the-art knowledge to the students in the field of Civil Engineering and produce competent civil engineers who will play vital role in the national development.

To provide critical learning for a broad function in various areas of Civil Engineering, including structural, environmental, geotechnical, water resources, and transportation engineering and construction management.

To make them aware of the advancement of engineering knowledge in the developed countries so that they may keep themselves abreast with such developments.

To impress upon them the spirit of discipline, teach them the code of ethics of the engineering profession and impress upon them to follow it during their practical life.

To prepare graduate engineers to be competitive in both national and international market by inculcating the engineering and managerial skills.

Graduates will be prepared with a solid foundation in mathematics, sciences, and technical skills needed to analyze and design civil infrastructure systems. Graduates will be familiar with current and emerging civil engineering and global issues, and have an understanding of ethical and societal responsibilities.

Graduates will have the necessary qualifications for employment in civil engineering and related professions, for entry into advanced studies, and for assuming eventual leadership roles in their profession.

3. Credit Hours
Duration: 4 years
Number of Semesters: 8
Total number of credits: 136+26=162

4. Framework for 4-year in BE in Civil Engineering

课程类别 Course Sort	课程代码 Course Code	课程名称 Course Title	学分 Credit	总学时 Hours	学时类型			考核	Semester and Hours per week								Teacher
					理论	实验	上机		1 春	2 秋	3 春	4 秋	5 春	6 秋	7 春	8 秋	
									16	16	16	16	16	16	16	0	
Common course		基本汉语 Basic Chinese	12	192	192			E	4	4	4						文法学院
		中级汉语 Intermediate Chinese	6	96	96							2	2	2			文法学院
		汉语听说 Chinese L & S	8	128	128			E	2	2	2	2					文法学院
		高等数学 Mathematics	8	128	128			E	4	4							理学院
		计算机基础 Computer Literacy	2.5	40	20		20	E	4								计算机学院
		公共基础课小计	36.5	584													
Foundation		大学物理 Physics	4	64	64			E	4								理学院
		C 语言程序设计 C Language	3	48	28		20	E		4/							计算机学院
		画法几何与工程制图 Descriptive Geometry & Engineering Drawing	4	64	64			E		4							理学院
		普通化学 General Chemistry	2.5	40	40			E		/4							化工学院
		土木工程概论 Introduction of Civil Engineering	2	32	32			E		/4							城建学院
		理论力学 Theoretical Mechanics	4	64	64			E			4/						理学院
		线性代数 Linear Algebra	2.5	40	40			E			4/						理学院
		概率论与数理统计 Probability and Statistics	3	48	48			E			/4						理学院
		材料力学 -1 Material Mechanics-1	2.5	40	32	8		E			2						理学院
		土木工程制图 Civil Engineering Drawing and CAD	2.5	40	20		20	E			2						理学院
		材料力学 -2 Material Mechanics-2	2	32	32			E				4/					理学院
		土木工程测量 Engineering Surveying	3	48	20	28		E				2					城建学院
	171063	房屋建筑学 Building System	3	48	48			E				3					城建学院

课程类别 Course Sort	课程代码 Course Code	课程名称 Course Title	学分 Credit	总学时 Hours	理论	实验	上机	考核	1 春 16	2 秋 16	3 春 16	4 秋 16	5 春 16	6 秋 16	7 春 16	8 秋 0	Teacher
		结构力学-1 Structural Mechanics-1	4	64	64			E				4					城建学院
		土木工程材料 Construction Materials	2.5	40	32	8		E				2					城建学院
		流体力学 Fluid Mechanics	2	32	28	4		E				2					城建学院
		工程地质 Engineering Geology	2	32	26	6		E				2					城建学院
		环境工程概论 Introduction of environmental engineering	1.5	24	24			E						2			城建学院
		结构力学-2 Structural Mechanics-2	4	64	64			E					4				城建学院
		工程经济学 Engineering Economics	2.5	40	40			E					3				城建学院
Major Core		土力学 Soil Mechanics	2.5	40	32	8		E						2			城建学院
		混凝土结构基本原理 Reinforced Concrete-1	4	64	64			E					4				城建学院
		道路规划 Road Planning	2	32	32			E					2				城建学院
		基础工程-1 Foundation Engineering-1	2	32	32			E						2			城建学院
		混凝土结构设计 Reinforced Concrete-2	3	48	48			E						2			城建学院
		交通工程 Transportation Engineering	2	32	32			E						2			城建学院
		土木工程施工技术 Construction Technology	2	32	32			E						2			城建学院
		建筑施工组织 Construction Organization	2	32	32			E						2			城建学院
		项目管理 Project management	2	32	32			E						4/			城建学院

课程类别 Course Sort	课程代码 Course Code	课程名称 Course Title	学分 Credit	总学时 Hours	学时类型			考核	Semester and Hours per week								Teacher
					理论	实验	上机		1 春 16	2 秋 16	3 春 16	4 秋 16	5 春 16	6 秋 16	7 春 16	8 秋 0	
		工程招投标 Project Bidding	2	32	32			E						4/			城建学院
		钢结构 Steel Structure	3	48	48			E							4		城建学院
		建 筑 工 程 概 预 算 Construction Project Budget	2.5	40	40			E							/4		城建学院
		结构软件设计与识图 Structural software design and Reading structural drawings	2	32			32	E							4		城建学院
		防灾工程学 Disaster prevention Engineering	2	32	32			E							/2		城建学院
		基础工程-2 Foundation Engineering-2	1	16	16			E							2/		城建学院
		水资源工程 Water Resource Engineering	2	32	32			E							2		城建学院
		荷 载 与 结 构 设 计 方 法 Loads and Structural Design Method	3	48	48											8/		城建学院
		结 构 设 计 Structure design	4	64	64											8		城建学院
Total			136	1960													

Where：E means Examination. T means Check。x/ means the first half of a semester; /x means the second half of a semester。

Practical Teaching

									1	2	3	4	5	6	7	8	
Practice		计算机辅助设计 Computer Aided Design Practice	1	1W				T			1						城建学院
		测量实习 Surveying Practice	2	2 W				T					2				城建学院
		认识实习 Perceptual Practice	2	2 W				T					2				城建学院

		学分	周数										开课单位
	施工组织课程设计 Course design of Construction Organization	2	2 W				T				2		城建学院
	施工图识图训练 Reading engineering drawings training	1	1W				T					1	城建学院
	工程概预算课程设计 Course design of engineering budget	2	2w				T					2	城建学院
	毕业设计Final Project	16	16W				T						16	城建学院
实践教学合计		26	26W					1	4		2	3	16	

Where：E means Examination. T means Check。x/ means the first half of a semester; /x means the second half of a semester。

W means week

5. Teaching Planning

Planning Semester \ Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	理论教学周数
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	∷	∷	×	×	×	×	×	×	×			18
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	∷	∷	×	×	×	×	×					16
3																		∷	∷	JS									17
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CL	CL	FJ	FJ	×	×	×	×	×	×	×		17
5		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	JL	∷	∷		×	×	×	×	×				16
6																	SG	SG	∷	×	×	×	×	×	×				16
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	ST	YS	YS	∷	∷	×	×	×					16
8	‖	‖	‖	‖	‖	‖	‖	‖	‖	‖	‖	‖	‖	‖	‖	‖													16

Where, — means theoretical teaching. ∷ means examination; × means vocation. JS means Computer Aided Design Practice. CL means Surveying Practice. FJ means Perceptual practice. SG means Construction organization Design Project. ST means Reading engineering drawings training. YS means Course design of engineering budget. ‖ means Final Project.