

Curriculum Plan for the CEPM Program
of
Jiangsu University
(CEPM 2011 Batch and later)

Duration of Study

The four-year Civil Engineering and Project Management (CEPM) undergraduate program consists of two periods, with the first three years for classroom instruction and the final year for students' practice. In the course of the program, students will study in Ghana for the first two years and in China for another two years.

Professional Emphases

Jiangsu University offers two majors within the CEPM program.

- Civil Engineering, involving the design and construction of buildings and bridges.
- Project Management, involving the control and planning of construction projects.

1. Civil Engineering

The Civil Engineering laboratory is sponsored jointly by Jiangsu Province and the Ministry of Education. The core courses will provide students with a solid professional knowledge in Mechanics and Civil Engineering as well as practical skills in geotechnical experiments, computer applications, construction supervision, and engineering structural tests.

The Civil Engineering department of Jiangsu University is authorized to confer Master of Engineering degrees in Structural Engineering, Traffic Engineering, Disaster Prevention and Mitigation and Protective Engineering. The department is also authorized to confer doctoral degrees in Solid Mechanics. Currently, there are nearly ten supervisors for masters and Ph.D. candidates in our department.

Equipped with a full set of technical skills, upon graduation you will be prepared for many different career opportunities, such as construction, structural design, education, management, and investment and development associated with the construction industry, while keeping in mind the social, moral, and legal impact of engineering on people.

The following key courses are offered during the first period of 3 years

Engineering Mechanics	Steel Structure Design Principles
Structural Mechanics	Construction Equipment
Fluid Mechanics	Bridge Engineering
Foundation Engineering	Road Surveying and Design
Civil Engineering Materials	Management Principles
Civil Engineering Surveying	Civil Engineering Construction
Concrete Structure Design Principle	Engineering Economics
Engineering Geology and Soil Mechanics	Architectural structure design
Architecture and Planning	Structural Analysis and the Finite Element Method

2. Project Management

China is in an important phase of developing civil engineering. Some large projects have been built up, and some are constructing. Based on this, the major aims to produce high quality, talented personnel with a basic knowledge of management science, a mastery of economics and law, as well as the professional knowledge associated with civil engineering technology and project management. The students will receive basic training for engineers so as to improve their abilities in the practice and innovation of the engineering industry. In addition, they will be trained to cultivate their personal and social skills. All this will ensure that the graduates will be qualified to manage whole projects from concept to completion in the field of architecture and civil engineering construction.

In order to meet the requirements of developing new technology, new material and new techniques in civil engineering, Jiangsu University uses a training scheme which emphasizes in-depth basic knowledge of engineering as well as competence in several other fields related to project management. The courses for this major fall into four categories: management, civil engineering technology, economics and law.

In order to develop students' all-around ability and professional proficiency, construction and engineering observations, field internships, graduation projects, social practice, geological practice and professional quality expansion are also required.

Graduates of the CEPM program can apply for admission to the master's or doctoral programs in civil engineering construction and management, management science and engineering. Moreover, by passing the examinations for certified cost engineers, certified supervision engineers and certified real estate appraisers, they can obtain national professional certifications.

Graduates of this major may engage in decision-making, planning and whole process management for engineering projects in various entities, such as large and medium-sized construction enterprises, EPC companies, real estate development companies, international economic cooperation companies, engineering consulting and assessment companies, construction companies, banks, research and education institutes, etc.

The following key courses are offered during the first period of three years

Engineering Mechanics	Management Science
Structural Mechanics	Engineering Graphics
Civil Engineering Surveying	Construction Equipment
Engineering Contract Management	Statistics
Architecture and Planning	Project Contract Law
Civil Engineering Materials	Project Evaluation
Architectural Structure Design	Capital Construction Accounting
Soil mechanics and Foundation	Management of Engineering Project
Civil Engineering Construction	Engineering Estimation
Financial Management	Project Cost Management
Project Investment and Financing	Economics Principle for Engineering

Objectives

Jiangsu University aims to produce high-quality graduates with a solid foundation of knowledge, a strong spirit of innovation and professional proficiency in construction technology as well as management.

Requirements

Students are required to:

- Abide by the relevant policies and decrees formulated by the Chinese Government, and the rules and regulations of Jiangsu University (JU).
- Respect the teaching staffs and Chinese traditions and customs.
- Develop scientific attitudes towards research, have certain theoretical foundation and systematic knowledge in the field of civil engineering.
- Have a strong interest in civil engineering and good professional ethics.
- Have a good command of Chinese language and get HSK certificates as required. Be able to read Chinese professional literature in the field of civil engineering.
- Be in good health.

Type A Courses

No.	School	Name of Course	Term	Credit	Total Hours	Theory Hours	Practice Hours	Required Elective
A0101	IIEEC	Chinese-I 汉语-I	1	10	150	150	0	Required
A0102	IIEEC	Chinese-II 汉语-II	2	10	150	150	0	Required
A0103	IIEEC	Chinese-III 汉语-III	3	10	150	150	0	Required
A0104	IIEEC	Chinese-IV 汉语-IV	4	10	150	150	0	Required
A0200	IIEEC	HSK Test 汉语水平考试	5	2	30	30	0	Required
A0401	SCSTE	Introduction on Computer 计算机基础	2	2	30	30	0	Required
A0402	SCSTE	Programming in F(C) F(C) 语言程序设计	3	4	60	45	15	Required
A0501	SD	Physical training-I 体育-I	1	2	30	0	30	Required
A0502	SD	Physical training -II 体育-II	2	2	30	0	30	Required
A0503	SD	Physical training -III 体育-III	3	2	30	0	30	Required
A0504	SD	Physical training -IV 体育-IV	4	2	30	0	30	Required
A0601	FS	Advanced Mathematics-I 高等数学-I	1	5	75	75	0	Required

A0602	FS	Advanced Mathematics-II 高等数学-II	2	5	75	75	0	Required
A0700	FS	Physics 物理学	1	6	90	90	0	Required
A0800	FS	Linear Algebra 线性代数	2	2	30	30	0	Required
A0900	FS	Probability and Statistics 概率统计	3	2	30	30	0	Required
A1000	FS	Physics Experiment 大学物理实验	2	2	30	0	30	Required
A1100	Library	Information Retrieval 文献检索	5	1	15	11	4	Required
		Total A		79	1185	1016	169	

Type B1 Courses (for Civil Engineering)

No.	School	Name of Course	Term	Credit	Total Hours	Theory Hours	Practice Hours	Required Elective
B0100	SCCE	Engineering Chemistry 工程化学	2	2	30	24	6	Required
B0200	SCEM	Introduction of Civil Engineering 土木工程概论	1	1	15	15	0	Required
B0301	SCEM	Basic Engineering Drawing 工程制图基础	1	3	45	35	10	Required
B0302	SCEM	Civil Engineering Drawing 土木工程制图	2	3	45	25	20	Required
B0401	SCEM	Engineering Mechanics-I 工程力学-I	3	5	75	65	10	Required
B0402	SCEM	Engineering Mechanics-II 工程力学-II	4	5	75	65	10	Required
B0500	SCEM	Structural Static Mechanics 结构静力学	4	6	90	75	15	Required
B0600	SEPE	Fluid Mechanics 流体力学	5	2	30	24	6	Required
B0700	SCEM	Civil Engineering Surveying 土木工程测量	3	3	45	31	14	Required
B0800	SCEM	Civil Engineering Materials 土木工程材料	3	3	45	31	14	Required
B0900	SCEM	Design Principle of Steel Structure 钢结构设计原理	6	4	60	50	10	Required
B1000	SCEM	Engineering Geology and Soil Mechanics 工程地质与土力学	4	3	45	33	12	Required

B1100	SCEM	Concrete Structure Design Principle 砼结构设计原理	5	6	90	78	12	Required
B1200	SCEM	Foundation Engineering 基础工程学	5	3	45	37	8	Required
B1300	SCEM	Dynamics of Structure 结构动力学	5	2	30	24	6	Required
B1400	SCEM	Structural Analysis and the Finite Element Method 结构分析有限元法	5	4	60	45	15	Required
B1500	SCEM	Architecture and Planning 建筑学与规划	4	3	45	38	7	Required
B1600	SCEM	Road Surveying and Design 道路勘测设计	5	3	45	38	7	Required
B1700	SCEM	Structural Analysis Software and Application 结构分析软件及应用	6	2	30	18	12	Required
B1800	SBA	Architectural structure design 建筑结构设计	6	4	60	50	10	Required
B1900	SCEM	Pavement and Subgrade Engineering 路基路面工程	6	4	60	50	10	Required
B2000	SCEM	Bridge Engineering 桥梁工程	6	4	60	50	10	Required
B2100	SCEM	Civil Engineering Construction 土木工程施工	6	4	60	50	10	Required
B2200	SCEM	Building Structures Inspection 土木工程测试学	6	3	45	35	10	Required
		Total B1		82	1230	986	244	

Type B2 Courses (for Project Management)

No.	School	Name of Course	Term	Credit	Total Hours	Theory Hours	Practice Hours	Required Elective
B0100	SCCE	Engineering Chemistry 工程化学	2	2	30	24	6	Required
B0200	SCEM	Overview of Project management 工程管理概论	1	1	15	15	0	Required
B0301	SCEM	Basic Engineering Drawing 工程制图基础	1	3	45	45	0	Required
B0302	SCEM	Civil Engineering Drawing 土木工程制图	2	3	45	25	20	Required
B0401	SCEM	Engineering Mechanics 工程力学	3	4	60	60	0	Required
B0402	SCEM	Structural Mechanics 结构力学	4	4	60	60	0	Required
B0500	SCEM	Economics 经济学	4	2	30	30	0	Required
B0600	SCEM	Management Principles 管理学原理	3	2	30	30	0	Required
B0700	SCEM	Civil Engineering Surveying 土木工程测量	3	3	45	30	15	Required
B0800	SCEM	Civil Engineering Materials 土木工程材料	3	3	45	30	15	Required
B0900	SCEM	Engineering Contract Management 工程合同管理	7	3	45	45	0	Required
B1000	SCEM	Soil mechanics and Foundation 土力学与地基基础	5	3	45	45	0	Required

B1100	SCEM	Project Evaluation 建设项目评估	5	3	45	45	0	Required
B1200	SCEM	Financial Management 财务管理	4	2	30	30	0	Required
B1300	SCEM	Engineering Estimation-I 工程估价-I	6	3	45	45	0	Required
B1400	SCEM	Project Cost Management 工程造价管理	7	3	45	45	0	Required
B1500	SCEM	Architecture and Planning 建筑学与规划	4	4	60	45	15	Required
B1600	SCEM	Engineering Estimation- II 工程估价-II	6	3	45	45	0	Required
B1700	SCEM	Project Investment and Financing 项目投资与融资	7	3	45	35	10	Required
B1800	SCEM	Engineering Economics 工程经济学	5	2	30	30	0	Required
B1900	SCEM	Architectural Structure Design 建筑结构设计	5	6	90	90	0	Required
B2000	SCEM	Project Contract Law 工程合同法律制度	6	2	30	30	0	Required
B3100	SCEM	Management of Engineering Project-I 工程项目管理-I	5	4	60	50	10	Required
B3200	SCEM	Management of Engineering Project-II 工程项目管理-II	6	4	60	50	10	Required
B4100	SCEM	Civil Engineering Construction 土木工程施工	6	4	60	54	6	Required

B5100	SBA	Economic Law 经济法	5	2	30	30	0	Required
B6100	SBA	Capital Construction Accounting 基建会计	7	2	30	30	0	Required
B5200	SCEM	Building Codes 建设法规	7	2	30	30	0	Required
B6200	SBA	Accounting Principle 会计学原理	3	2	30	30	0	Required
B6300	SBA	Statistics 统计学	4	2	30	30	0	Required
		Total B2		86	1290	1183	107	

Type C1 Courses (for Civil Engineering)

No.	School	Name of Course	Term	Credit	Total Hours	Theory Hours	Practice Hours	Required Elective
C0100	SCEM	Earthquake-resistance of Engineering and Disaster Prevention 土木工程抗震与防灾	7	3	45	35	10	Elective
C0200	SCEM	Engineering Accident Treatment 建筑工程事故处理	7	3	45	35	10	Elective
C0300	SCEM	Engineering Equipment 建筑设备	7	3	45	35	10	Elective
C0400	SCEM	Construction Supervision and Contract Management 建设监理与合同管理	7	3	45	35	10	Elective
C0500	SCEM	Construction Software and Applications 施工软件及应用	6	2	30	18	12	Elective
C0600	SCEM	Large –span Structures 大跨度结构	7	3	45	35	10	Elective
C0700	SCEM	Modern Prestressed Structure 现代预应力结构	7	3	45	35	10	Elective
C0800	SCEM	Management of Engineering Project 建设项目管理	7	4	60	60	0	Elective
C0900	SCEM	Engineering Economics 工程经济学	5	2	30	30	0	Elective
		Total C1		26	390	318	72	

Type C2 Courses (for Project Management)

No.	School	Name of Course	Term	Credit	Total Hours	Theory Hours	Practice Hours	Required Elective
C0100	SCEM	Urban Planning 城市规划	6	2	30	30	0	Elective
C0200	SCEM	Engineering Accident Treatment 建筑工程事故处理	7	3	45	35	10	Elective
C0300	SCEM	Operations Research 运筹学	7	3	45	35	10	Elective
C0400	SCEM	Construction Supervision 工程监理	6	2	30	30	0	Elective
C0500	SCEM	Property Management 物业管理	6	3	45	45	0	Elective
C0600	SCEM	Real Estate Economics 房地产经济学	5	2	30	30	0	Elective
C0700	SCEM	Introduction to environmental Engineering 环境工程导论	6	1	15	15	0	Elective
C0900	SCEM	Engineering Equipment 建筑设备	5	2	30	30	0	Elective
C1000	SCEM	Real Estate Development and Management 房地产开发与经营	7	2	30	18	12	Elective
		Total C2		20	300	268	32	

Type D1 Courses (for Civil Engineering)

No.	Name of Course	Term	Credit	Weeks	Remark
D0100	Practice for Broadening 认识实习	1	1	1	Required
D0200	Construction Practice 生产实习	7	4	4	Required
D0300	Practice of Engineering Geology 工程地质实习	4	1	1	Required
D0400	Comprehensive Test of Civil Engineering Test 土木工程测试综合试验	6	1	1	Required
D0500	Surveying Practice 测量实习	3	2	2	Required
D0600	Course Design Work for Foundation Engineering 基础工程课设	5	1	1	Required
D0700	Course Design Work for Road Surveying 道路勘测课设	5	1.5	1.5	Required
D0800	Course Design Work for Architecture and Planning 建筑学与规划课设	4	1.5	1.5	Required
D0900	Course Design Work for Concrete Structures 砼结构课设	5	2	2	Required
D1000	Course Design Work for Steel Structures 钢结构课设	6	1.5	1.5	Required
D1100	Course Design Work for Bridge Engineering 桥梁工程课设	6	1.5	1.5	Required

D1200	Course Design Work for Pavement and Subgrade Engineering 路基路面课设	6	1.5	1.5	Required
D1300	Course Design Work for Construction Organization 施工组织设计	6	1.5	1.5	Required
D1400	Lectures on Special Topics and Document Reading 专题讲座与文献阅读	7	1	1	Required
D1500	Graduation Practice and Design 毕业设计（论文）	8	16	16	Required
	Total D1		38	38	

Type D2 Courses (for Project Management)

No.	Name of Course	Term	Credit	Weeks	Remark
D0100	Practice for Broadening 认识实习	1	1	1	Required
D0200	Construction Practice 生产实习	7	4	4	Required
D0300	Course Design Work for Project Valuation 工程估价课程设计	6	2	2	Required
D0400	Simulation of Project Bidding 工程招投标模拟	7	1	1	Required
D0500	Surveying Practice 测量实习	3	2	2	Required
D0800	Course Design Work for Architecture and Planning 建筑学与规划课程设计	4	2	2	Required
D0900	Course Design Work for Engineering Structures 工程结构课程设计	4	2	2	Required
D1000	Course Design Work for Project Evaluation 建设项目评估课程设计	6	2	2	Required
D1300	Course Design Work for Construction Organization 施工组织设计	6	1	1	Required
D1400	Statistical Investigation Practice 统计调查实践	5	2	2	Required
D1500	Latest Development of Civil Engineering 土木工程最新动态	5	1	1	Required
D1600	Graduation Practice and Design 毕业设计（论文）	8	16	16	Required
	Total D2		36	36	

Note:

IEEC- International Education and Exchange College

SCSTE-School of Computer Science and Telecommunication Engineering

SD-Sport Department

FS-Faculty of Science

SCCE- School of Chemistry and Chemical Engineering

SBA- School of Business Administration

SCEM- School of Civil Engineering and Mechanics

SEPE- School of Energy and Power Engineering

The Allocation of Credits and Credit Hours**The Allocation of Credits and Credit Hours (for Civil Engineering)**

Term	Credit	Total Hours	Theory Hours	Practice Hours	Required Hours	Elective Hours	Required Credit	Elective Credit
1	28	405 1 Week	365	40 1 Week	405	0	28	0
2	28	420	334	86	420	0	28	0
3	31	435 2 Weeks	352	83 2 Weeks	435	0	31	0
4	31.5	435 2.5 Weeks	361	74 2.5 Weeks	435	0	31.5	0
5	29.5	375 4.5 Weeks	317	58 4.5 Weeks	345	30	27.5	2
6	32	375 7 Weeks	303	72 7 Weeks	375	0	32	0
7	29	360 5 Weeks	288	72 5 Weeks	0	360	5	24
8	16	16 Weeks	0	16 Weeks	0	0	16	0
Total	225	2805 38 Weeks	2320	485 38 Weeks	2415	390	199	26

The Allocation of Credits and Credit Hours (for Project Management)

Term	Credit	Total Hours	Theory Hours	Practice Hours	Required Hours	Elective Hours	Required Credit	Elective Credit
1	30	435 1 Week	405	30 1 Weeks	435	0	30	0
2	30	450	349	101	450	0	30	0
3	30	420 2 Weeks	360	60	390	0	30	0
4	30	390 4 Weeks	345	45 4 Weeks	390	0	30	0
5	30	405 3 Weeks	391	14 3 Weeks	345	60	26	4
6	29	360 5 Weeks	344	16 5 Weeks	240	120	21	8
7	26	315 5 Week	273	42 5 Weeks	195	120	18	8
8	16	16 Weeks	0	16 Weeks	0	0	16	0
Total	221	2775 36 Weeks	2467	296 36 Weeks	2475	300	201	20