

English-medium Courses for master students at TJU (2014)

No.	Course	Area	Credit hour/unit
1	Nonlinear Vibration	Mechanics	32/2
2	Perturbation Methods in Fluid Mechanics	Mechanics	32/2
3	Virtual Prototype Technology	Mechanical Engineering	24/1.5
4	Fuel Cell Technology	Power Mechanical Engineering	24/1.5
5	Continua Mechanics and Plastic Mechanics	Mechanics	24/1.5
6	Laser Measurement Technology and Applications	Instrument Science and Technology	32/2
7	Micro-system Design and Fabrication	Instrument Science and Technology	32/2
8	Medical Physics	Biomedical Engineering	32/2
9	System Identification	Control Science and Engineering	32/2
10	RF Circuit Design	Electronic Science and Technology	32/2
11	Optoelectronics and Photonics Principles and Practices	Electronic Science and Technology	32/2
12	Digital Imaging Technologies and Applications	Information and Communication Engineering	32/2
13	Broadband Multimedia Information Processing and Transmission	Information and Communication Engineering	32/2
14	Urban Hydrology	Hydraulic Engineering	32/2
15	Seismic Design of Buildings and Bridges	Civil Engineering	32/2
16	Matlab in Civil Engineering	Civil Engineering	32/2
17	Transport Phenomena	Chemical engineering & technology	40/2.5

18	Separation Process	Chemical engineering & technology	32/2
19	Technical Writing	Materials science and engineering	40/2.5
20	Physical Metallurgy	Materials science and engineering	32/2
21	Fundamentals of Semiconductor Optoelectronic Materials	Materials science and engineering	24/1.5
22	Modern Management	Management Science and Engineering	32/2
23	Public Human Resources Management	Public Administration	32/2
24	General Principles of Economic Law	Law	32/2
25	An Introduction to Translation Studies	Foreign Language and Literature	32/2
26	Anthropological Linguistics	Chinese Language and Literature	32/2
27	Environmental Impact Assessment	Environmental Science & Engineering	32/2
28	Computer Security	Computer Science and Technology	32/2
29	Ontology and its Application	Computer Science and Technology	32/2
30	Plant Gene Engineering	Biology	32/2
31	Architecture Design I	Architecture	100/3
32	Architecture Design II	Architecture	100/3
33	Research Method	Architecture	32/2
34	Practice of Architectural Design	Architecture	16/1
35	Architecture and the Aesthetics of Compression	Architecture	32/2
36	Contemporary Architectural Theory And Review	Architecture	16/1

37	Ecological Environment and Urban Development	Architecture	16/1
38	The Analysis of World Cultural Heritage and Case Study	Architecture	16/1
39	Design in Motion	Architecture	16/1
40	International Comparative Planning	Architecture	16/1
41	Integrated Building and Urban Design in Resource Conservation Perspective	Architecture	16/1
42	Sustainable Regeneration Theory and Practice of Historic Environment	Architecture	16/1
43	Study of Architecture Documents and Case	Architecture	16/1
44	Nationalism in Chinese Architecture and Technology	Architecture	16/1
45	Thinking and Cognition of Design	Architecture	16/1
46	Generation of Design	Architecture	16/1
47	Comparative Study of Chinese and foreign Urban Space	Architecture	16/1
48	Modern Software Engineering	Computer Software	32/2
49	Information Security Technology	Computer Software	32/2
50	Unified Modeling Language	Computer Software	32/2
51	Formal Method and Logic	Computer Software	32/2
52	Visual Languages and Information Visualization	Computer Software	32/2
53	Computer Networks	Computer Software	32/2
54	Software Project Management	Computer Software	32/2
55	Advanced Operating Systems	Computer Software	32/2
56	Digital Image Processing	Computer Software	32/2
57	Advanced Computer Graphics	Computer Software	32/2
58	Visual Analytics	Computer Software	32/2

59	Human Computer Interaction Design	Computer Software	32/2
60	Modern Embedded System	Computer Software	32/2
61	Data mining	Computer Software	32/2
62	Virtualization and Cloud Computing	Computer Software	32/2
63	Pattern Analysis and Recognition	Computer Software	32/2
64	Advanced Computer Architecture	Computer Software	32/2
65	Analysis for Information Science	Computer Software	32/2
66	Natural Language processing	Computer Software	32/2
67	Mathematical Logic	Computer Software	32/2
68	Elasticity and Plasticity in Engineering	Civil Engineering	32/2
69	Finite Element Analysis	Civil Engineering	32/2
70	Seismic Design of Buildings and Bridges	Civil Engineering	32/2
71	Advanced Steel Structures	Civil Engineering	32/2
72	Advanced Reinforced Concrete Structures	Civil Engineering	32/2
73	Theory and Technique of Engineering Structure Experiments	Civil Engineering	32/2
74	Advanced Soil Mechanics	Civil Engineering	32/2
75	Stability of Steel Structures-The theory and implement	Civil Engineering	32/2
76	Large-span Structural Systems	Civil Engineering	32/2
77	Construction Materials	Civil Engineering	48/3
78	Advanced Bridge Structures	Civil Engineering	32/2
79	Dynamics of Structures	Civil Engineering	32/2
80	Theory and Application of Aseismic Engineering	Civil Engineering	32/2
81	Design of High-rise Buildings	Civil Engineering	32/2