

UNIVERSITY OF THE EAST

Graduate School

Manila, Philippines

**MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT (MSCM)
FLEXIBLE MODULAR PROGRAM**

We recognize the needs of working Graduate Students to fit their continuing education pursuits in higher education around a work-life balance that supports their career directions and professional commitments. Supported by the university's active scientific community, public sector alumni linkages, and robust online learning environment, the Flexible Modular Program in Master of Science in Construction Management (MSCM) provides the opportunity to discover and learn cutting-edge knowledge and best practices from the sustainable construction management perspective:

Module	Semester	Courses
1. Ethical and Scientific Foundations that support Practice in Construction Management	Semesters 1 and 2	GCT 7101 Project Management in Construction GCT 7102 Construction Accounting and Financial Management GCT 7202 Planning and Programming in Construction GCT 7201 Methods and Procedures in Construction GRR 7501 Statistical Methods Applied to Research GCT 7205 Decision Making in Construction Management
2. Dynamic Capabilities	Summer and Semester 3	GCT 7203 Engineering Work and Quality Control GCT 7206 Contracts Specifications and Management : Changes, Claims and Negotiations GCT 7204 Project Safety and Risk Management GCT 7207 Resource Management in Construction GRR 7502 Research Methods across Disciplines
3. Elective	Semester 4	GCT 7301 Lean Construction GCT 7302 Case Studies in Project Operation GCT 7303 Advanced Construction Productivity GCT 7304 Special Topics in Construction Management GIT 718 Special Topics in Emerging IT

		GRR 7700 Comprehensive Examination
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4 Thesis Writing	Summer and Semester 5	GRR 7980 Thesis 1 GRR 7990 Thesis 2
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Each module must be completed in its entirety. The last module provides learners with the option to choose one (1) elective course essential to their work environment. The Comprehensive Examination will be administered during Semester 4.

Annex A

Course Sequence

Week	Year 1			Year 2			Year 3
	Semester 1	Semester 2	Summer	Semester 3	Semester 4	Summer	Semester 5
1	GCT 7101	GCT 7201	GCT 7203	GCT 7204	Elective 1	GRR 7980 (Thesis 1)	GRR 7990 (Thesis 2)
2	GCT 7101	GCT 7201	GCT 7203	GCT 7204	Elective 1		
3	GCT 7101	GCT 7201	GCT 7203	GCT 7204	Elective 1		
4	GCT 7101	GCT 7201	GCT 7206	GCT 7204	Elective 1		
5	GCT 7101	GCT 7201	GCT 7206	GCT 7204	Elective 1		
6	GCT 7101	GCT 7201	GCT 7206	GCT 7204	Elective 1		
7	GCT 7102	GRR 7501		GCT 7207	GRR 7700 (Comprehensive Examination)		
8	GCT 7102	GRR 7501		GCT 7207			
9	GCT 7102	GRR 7501		GCT 7207			
10	GCT 7102	GRR 7501		GCT 7207			
11	GCT 7102	GRR 7501		GCT 7207			
12	GCT 7102	GRR 7501		GCT 7207			
13	GCT 7202	GCT 7205		GRR 7502			
14	GCT 7202	GCT 7205		GRR 7502			
15	GCT 7202	GCT 7205		GRR 7502			
16	GCT 7202	GCT 7205		GRR 7502			
17	GCT 7202	GCT 7205		GRR 7502			
18	GCT 7202	GCT 7205	GRR 7502				

COURSE SCHEDULE**Year 1, Semester 1**

Week	Subject	Day	Time
1 to 6	GCT 7101	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn
7 to 12	GCT 7102	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn
13 to 18	GCT 7202	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn

Year 1, Semester 2

Week	Subject	Day	Time
19 to 24	GCT 7201	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn
25 to 30	GRR 7501	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn
31 to 36	GCT 7205	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn

Year 1, Summer

Week	Subject	Day	Time
37 to 39	GCT 7203	M T W F S	6 to 9 p.m. 6 to 9 p.m. 6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn 2 to 5 p.m.
40 to 42	GCT 7206	M T W F S	6 to 9 p.m. 6 to 9 p.m. 6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn 2 to 5 p.m.

Year 2, Semester 3

Week	Subject	Day	Time
1 to 6	GCT 7204	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn
7 to 12	GCT 7207	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn
13 to 18	GRR 7502	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn

Year 2, Semester 4

Week	Subject	Day	Time
19 to 24	Elective 1	T Th Sat	6 to 9 p.m. 6 to 9 p.m. 9 to 12 nn
	Comprehensive Examination		

Year 2, Summer

Week	Subject	Day	Time
37-42	GRR 7980 (Thesis 1)		

Year 3, Semester 5

Week	Subject	Day	Time
1-18	GRR 7990 (Thesis 2)		

Curriculum

Master of Science in Construction Management (MSCM) (Thesis Program)	Units
Core	
GCT 7101 Project Management in Construction	3
GCT 7102 Construction Accounting and Financial Management	3
GRR 7501 Statistical Methods Applied to Research	3
GRR 7502 Research Methods across Disciplines	3
12	
Major	
GCT 7201 Methods and Procedures in Construction	3
GCT 7202 Planning and Programming in Construction	3
GCT 7203 Engineering Work and Quality Control	3
GCT 7204 Project Safety and Risk Management	3
GCT 7205 <u>Decision Making in Construction Management</u>	3
GCT 7206 Contracts Specifications and Management : Changes, Claims and Negotiations	3
GCT 7207 Resource Management in Construction	3
21	
Elective	
GCT 7301 <u>Lean Construction</u>	3
GCT 7302 Case Studies in Project Operation	3
GCT 7303 <u>Advanced Construction Productivity</u>	3
GCT 7304 Special Topics in Construction Management	3
GIT 718 Special Topics in Emerging IT	3
3	
GRR 7700 Comprehensive Examination	
Thesis Writing	

GRR 7980 Thesis I	3
GRR 7990 Thesis 2	3
	6
Total	42

Core

GCT 7101 Project Management in Construction

Organization structure design of construction firm to suit construction project; qualitative techniques to measure work accomplishments and status; project monitoring and control; effective project communication; problem solving and decision making (3 units)

GCT 7102 Construction Accounting and Financial Management

Theories and concepts of financial management and management accounting, application in practical decision making and maximizing the value of the construction firm for the interests of the owner and shareholder (3 units)

GRR 7501 Statistical Methods Applied to Research

Fundamentals of statistics as applied to master's degree research, including population, sample, parameter, statistics, and variable; the branches of statistics, sources of data, sampling concepts, sample selection methods; analysis and interpretation of data using statistics software (3 units)

GRR 7502 Research Methods across Disciplines

Methods and designs, concepts, processes, tools, and interpretation of results of research in different disciplines (3 units)

Major

GCT 7201 Methods and Procedures in Construction

Effective procedures, methods, equipment applied in the construction of horizontal and vertical projects; common problems encountered in the various stages of construction with corresponding alternative methods of execution (3 units)

GCT 7202 Planning and Programming in Construction

Modern methods of planning, programming, managing and applying construction project schedules; review of PERT CPM; quantity take offs; unit cost for labor and materials; analysis and control of project cost (3 units)

GCT 7203 Engineering Work and Quality Control

Quality control system to perform sufficient inspection and tests for items of work; conformance with the project specifications and drawings (3 units)

GCT 7204 Project Safety and Risk Management

Identification, analysis and evaluation of project safety and risk management, project security; traffic control; use of safety devices in construction and government regulations and specifications (3 units)

GCT 7205 – Decision Making in Construction Management

Decision making strategies of construction managers in the different phases of project implementation, including unexpected scenarios (3 units)

GCT 7206 - Contracts Specifications and Management: Changes, Claims and Negotiations

Law of contracts; analysis and interpretation of specifications; project communication, claims/negotiations and change order documents; contract negotiation and documentation; promotion and design construction (3 units)

GCT 7207 Resource Management in Construction

Problems and programs in the management of human resources, analytical approaches and implementing techniques in manpower management in the construction industry (3 units)

Electives**GCT 7301 Lean Construction**

Fundamental concepts of lean construction: management, tools and equipment, measurements, techniques, and basic application; production management based on improved architecture, engineering, construction and product (3 units)

GCT 7302 Case Studies in Project Operation

Analysis of practical cases encountered by construction companies, principles and techniques used in the formulation and administration of construction policies operations and scope of responsibilities of construction managers (3 units)

GCT 7303 Advanced Construction Productivity

Management of construction productivity through application of advanced methods, crew balance methods, work sampling and process flow charts as a means in addressing problems that affect construction productivity (3 units)

GCT 7304 Special Topics in Construction Management

This course will address emerging topics and can be taken by the student twice when taught by two different visiting lecturers (3 units)

GIT 718 Special Topics in Emerging IT

Review a set of conceptual frameworks of IT management; develop critical view

of two levels of IT management - strategic and tactical; the value/importance of IT from strategic and tactical perspectives; the IT management challenges of managing people, process and technology.

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