NEW ENGLAND TECH

Construction Management
Master of Science Degree
(For students entering their program July 2019 – 201940 or later)

General Information

The master's program in Construction Management (MSCM) at New England Institute of Technology is designed for construction professionals who desire to advance their technical and managerial knowledge in the construction industry. The program emphasizes the relevance of continuous learning to personal and professional growth through the combination of advanced traditional construction management courses and an integrated management core.

The MSCM program is designed to equip current or aspiring construction managers with the necessary tools to make thoughtful decisions that affect an organization's management needs. The program's mission is built around central themes that drive modern construction industry operations: best practices of leaders and management professionals in the construction industry, construction project accounting and finance, environmental and health and safety policy, construction law, and the software applications that support the construction management profession.

Successful graduates may be able to advance their careers by qualifying for positions such as project managers, project executives, directors of construction operations, and comparable leadership roles in construction safety, quality control, and estimating/scheduling.

Mission and Outcomes of the Construction Management Program

New England Institute of Technology's Master of Science in Construction Management program is designed for a broad spectrum of individuals, with diverse educational backgrounds and/or work experiences, seeking to develop the multidisciplinary skills necessary to become effective construction professionals. The program emphasizes the relevance of continuous learning to personal and professional growth.

NEIT's master's degree curriculum blends modern construction management theory, best-practices and technical skills with the contemporary business management principles that drive 21st century organizational performance. Students will study topics ranging from lean construction, risk management and construction delivery methods, to building and leading effective project teams. The use of building information modeling (BIM), scheduling, estimating, and report generating software as analytical tools, is integrated into the curriculum to upgrade a student's technical skill sets. Utilization of relevant case studies, courses taught by professionals practicing in the construction management field and engagement with other Master of Science in Construction Management classmates employed in the field are means by which students will extend the educational process into the real-world of construction management and broaden their perspective on this dynamic profession. The fully online delivery format provides the flexibility necessary for construction industry practitioners to continue their education and enhance their potential for career growth.

Program Outcomes
Students will:

1. Acquire a Construction Management perspective that is informed by the linkages between Construction and Management (i.e., ethics, labor, accounting & finance, dispute resolution, negotiations) best practices.
2. Demonstrate the ability to build and lead effective teams using appropriate interpersonal skills.
3. Proactively adopt and integrate emerging technology within Construction Management practices.
4. Evaluate and implement appropriate contract delivery methods based on desired project outcomes.
5. Analyze construction projects relative to fundamental aspects of construction management (i.e., cost, schedule, quality, safety, ethics) and develop appropriate solutions.
6. Acquire ability to effectively assess and manage risk in a construction management project.
7. Acquire an appreciation for and ability to apply the principles and practices of sustainability in a construction management project.

Curriculum

Sample Plan of Study – Course Schedule subject to change

Term I

Course No.		Course Title	C	L	T
MGM	533	Advanced Project Management	4	0	4
CM	511	Construction Delivery Methods	4	0	4
			8	**0**	**8**

Term II

Course No.		Course Title	C	L	T
CM	520	Effective Projects and Teams	4	0	4
CM	521	Risk Management	4	0	4
			8	**0**	**8**

Term III

Course No.		Course Title	C	L	T
CM	531	Construction Health & Safety	4	0	4
MGM	504	Managerial Finance	4	0	4
		Optional			
CPT	591	Workplace Practicum I	0	20	1
			8	**0/20**	**8/9**

Term IV

Course No.		Course Title	C	L	T
CM	541	Lean Construction Principles & Practices	4	0	4
		CHOOSE ONE			
CM	542	Building Information Modeling (On Campus)	4	0	4
CM	543	Infrastructure Planning & Development			
		Optional			
CPT	592	Workplace Practicum II	0	20	1
			8	**0/20**	**8/9**

Term V

Course No.		Course Title	C	L	T
CM	512	Construction and the Environment	4	0	4
CM	513	Relationship & Dispute Management	4	0	4
		Optional			
CPT	593	Workplace Practicum III	0	20	1
			8	**0/20**	**8/9**

Term VI

Course No.		Course Title	C	L	T
CM	540	CM Master's Project	5	0	5
		Optional			
CPT	594	Workplace Practicum IV	0	20	1
			5	**0/20**	**5/6**
Total Quarter Credit Hours = 45-49					

Legend
C = Number of lecture hours per week
L = Number of laboratory hours per week
T = Total Quarter Credit Hours where each lecture hour per week is one credit, every 2-4 laboratory hours are one credit depending on the expected amount of pre- or post-lab work.

Subject to change.

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Degree Progress Checklist

Check off each completed course.

T1	MGM	533	_____
	CM	511	_____
T2	CM	520	_____
	CM	521	_____
T3	CM	531	_____
	MGM	504	_____
	Optional		
	CPT	591	_____
T4	CM	541	_____
	CHOOSE ONE		
	CM	542	_____
	or		
	CM	543	_____
	Optional		
	CPT	592	_____
T5	CM	512	_____
	CM	513	_____
	Optional		
	CPT	593	_____
T6	CM	540	_____
	Optional		
	CPT	594	_____

Subject to change.
Please see your advisor for any questions.

Course Descriptions

CM 511 Construction Delivery Methods
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
This course researches the multiple types of contract delivery methods used in the construction industry and the project administration and legal issues associated with each. Topics will include contract type, party responsibility, project documentation, relevant contract law, and dispute resolution.

CM 512 Construction and the Environment
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
This course will focus on the environmental impact of construction projects. The course will examine best practices to ensure sustainable design and construction of building facilities, site development and infrastructure work. Topics covered will include Environmental Impact Assessment (EIA), Low Impact Design (LID), Leadership in Energy and Environmental Design (LEED), and the Institute for Sustainable Infrastructure (ISI) guidelines among others. Characteristics of successful sustainable projects will be examined through case studies and engagement with industry professionals.

CM 513 Relationship & Dispute Management
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
This course will focus on building and maintaining effective relationships across the various diverse stakeholders in the construction industry – such owners/executives, employees, general contractors, construction managers, specialty trades, suppliers, and customers. Students also learn conflict and effective conflict management, and the principled negotiation approach through sample application. Students will understand and practice dispute resolution and management. Students will focus on the impact of diversity on relationship and conflict management, negotiation, and dispute resolution.

CM 520 Effective Projects and Teams
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
In this course, students will learn the unique aspects of teams in the construction industry, the characteristics of highly effective teams, and how to develop and manage such teams. Students will practice teamwork and leading teams through practical application exercises. Students will also explore the impact of labor demographics, job/contract, and the construction industry culture and practices on effective teamwork and performance. Students will understand the connection between teams, project management, and effective performance.

CM 521 Risk Management
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
In this course, students will study the principles and techniques used in risk analysis and mitigation in the construction industry. Topics will include types and sources of risk, risk analysis tools, risk hierarchy, and strategies to minimize risk impact on a construction project. Through case studies, students will analyze the relationship between risk and project success.

CM 531 Construction Health & Safety
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
This course will focus on OSHA regulations pertinent to construction field operations. Attention will be directed to the best practices, means, methods and processes to develop and implement safety planning policies and measurement of those policies. Emphasis will be placed on OSHA Standards for the construction industry with special attention to those areas which are of greatest concern to OSHA in field operations, Personal Protection, Fall Protection, Struck by Objects, Electrocutions, Confined Space Entry, and Caught in Between.

CM 540 CM Master's Project
5 Class Hours 5 Quarter Credit Hours
Prerequisites: MGM 504, MGM 533, CM 511, CM 512, CM 513, CM 520, CM 521, CM 531, CM 541, CM 542 (or CM 543)
Through the lens of contemporary leadership theory, application and best practices in the construction industry, students will explore and understand their leadership style, and related strengths and challenges. Students will analyze core values, common values and ethical dilemmas in the construction workplace, and how to effectively respond to such dilemmas. Case Studies involving actual construction industry leaders will be used to explore the current challenges and opportunities in the field, such as safety and quality, sustainability, cost management, and labor issues. A final masters project will entail research and correlation of managerial/leadership issues in the construction field to the MS Construction Management program outcomes.

CM 541 Lean Construction Principles & Practices
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
In this course, students will examine the principles and practices of the philosophy of lean manufacturing as applied to construction. Topics will include case studies, customer value definition, process analysis, waste reduction, value added activities, the use of "pull scheduling," and the need for continuous improvement.

CM 542 Building Information Modeling
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
THIS COURSE IS DELIVERED ON CAMPUS
This course provides students with an industry view of the application of Building Information Modeling (BIM) to a construction project. Students will study basic computerized modeling technology and analyze its relationship to the development of building information modeling data.

CM 543 Infrastructure Planning & Development
4 Class Hours 4 Quarter Credit Hours
Pre/co-requisite: MGM 533
In this course, students will examine public sector infrastructure planning, design and implementation at the local, regional and state level; the policies, procedures and organizations behind the planning and development of infrastructure projects; the funding of public sector infrastructure projects; and the methods for the award of contracts that ultimately lead to active construction projects. Through selected examples, students will investigate the relationship between physical infrastructure systems including roads, public transportation, community facilities, public open space, surface drainage, and electric, gas, water, and waste disposal.

CPT 591 Workplace Practicum I
20 Field Hours 1 Quarter Credit Hour
Prerequisite: Requires successful completion of four courses in the master's program and approval of the Graduate Director or Department Chair
In this optional course, students will use knowledge gained through previous coursework in the master's program with planned and supervised work experiences in the public or private sector. The course allows students to enhance the practical skills necessary for success by being exposed to the reality of the world of work beyond the boundaries of the campus and enhancing their self-confidence and career direction. Students are required to provide bi-weekly status reports to the Graduate Program Director while enrolled in this course.

CPT 592 Workplace Practicum II
20 Field Hours 1 Quarter Credit Hour
Prerequisite: CPT *591*
This course is a continuation of the Workplace Practicum begun in CPT 591.

CPT 593 Workplace Practicum III
20 Field Hours 1 Quarter Credit Hour
Prerequisite: CPT *592*
This course is a continuation of the Workplace Practicum begun in CPT 591 and continued in CPT 592.

CPT 594 Workplace Practicum IV
20 Field Hours 1 Quarter Credit Hour
Prerequisite: CPT 593
This course is a continuation of the Workplace Practicum begun in CPT 591 and continued in CPT 593.

MGM 504 Managerial Finance
4 Class Hours 4 Quarter Credit Hours
Prerequisite: MGM 533
Students will examine the basic principles of finance and their application to decision-making in organizations. The overall purpose of this course is for students to obtain a working knowledge of banking, financial statements, and capital budgeting.

MGM 533 Advanced Project Management
4 Class Hours 4 Quarter Credit Hours
Project management is more than merely parceling out work assignments to individuals and hoping that they will somehow accomplish a desired result. In fact, projects that could have been successful often fail because of such take-it- for-granted approaches. Individuals need hard information and real skills to work successfully in a project environment and to accomplish project objectives. Topics include project management life cycle and process; identifying and selecting projects; developing a project proposal; techniques for planning, scheduling, resource assignment, budgeting, and controlling project performance; project risks; project manager responsibilities and skills; project team development and effectiveness; project communication and documentation; and project management organizational structures. The concepts in the course support the project management knowledge areas of the Project Management Institute's A Guide to the Project Management Body of Knowledge (PMBOK® Guide).

Questions & Answers

1. For whom is the Master of Construction Management program designed?

The New England Institute of Technology's Master of Construction Management (MSCM) degree program is delivered via an online format to meet the needs of working professionals in the fields of architecture, engineering, construction management, interior design, and other related fields.

2. What are the entrance requirements for the MSCM program?

Candidates possess a Bachelor of Architecture degree, Bachelor of Science degree in Architecture, Architectural Engineering Technology, Civil Engineering, Civil Engineering Technology, Interior Design, Construction Management, Planning, Business, Finance, Management or a degree in a related field from an accredited institution. Significant professional experience may also be considered in lieu of an appropriate degree and will be evaluated individually. An official transcript along with other supporting documentation must be supplied to NEIT to satisfy the program entry requirements.

Candidates will also need to submit a personal statement and resume as part of the admission process. The statement should detail your interest in the program and how successful completion of the program will enable you to accomplish your professional goals.

3. Do I need to take the Graduate Record Exam (GRE) to be accepted into the program?

No. GREs are not required for acceptance into the MSCM program.

4. Is there a residency requirement?

No. There is no residency requirement for the program; however, students may elect to participate in the on-campus option available in the CM 542 Building Information Modeling course. This option allows students to participate in an intensive on-campus learning experience. This option is not a requirement to successfully complete the course.

5. How do online courses work?

Online courses at New England Institute of Technology are developed by a faculty-led team of management, construction, learning, and technology experts. The courses are designed to be interesting, relevant and engaging, and to have a real impact on students in their lives and on their careers. In an online delivery system, there are no formal or scheduled times when students are required to meet. The majority of the course work is expected to be completed based on the student's personal and professional schedule within the context of the course requirements. Faculty post weekly lectures and assignments online along with associated due dates. Faculty may also schedule online discussions or other class activities through the Canvas learning management system that may require you to be available to participate at a specific time.

6. How is taking an online course different from an on-campus course?

Online courses offer you flexibility in the scheduling of your class and study time. Instead of meeting at a fixed time and location, your online course will run on a weekly schedule starting on a Monday and ending on a Sunday evening. Some courses may require you to login to your course regularly and you are still required to submit assignments by the due dates specified in the syllabus.

Online courses do require self-discipline and self-motivation to complete the work that is required by the course. Since there are no scheduled class times, you will need to dedicate an appropriate amount of time to review the course content online, complete the readings, participate in the online discussion forums, and complete other work as assigned.

7. Do I need special computer skills in order to take an online course?

You'll need basic familiarity with your computer, for example: emailing, using the Web, and downloading and attaching documents. No special equipment is required: just a modern Windows-based computer, an office suite such as Microsoft Office, and a broadband internet connection. Students opting to enroll in the elective course, MSCM 542 Building Information Modeling, should ensure their computer can support the latest version of Revit® software.

8. What are the hardware and software requirements for the program?

	Recommended Minimum
Operating System:	Windows 10 or Macintosh OS X (10.14)
Processor:	2+ GHz
Memory:	4GB
Plug-ins:	Adobe PDF Reader, Flash Adobe PDF Reader, Flash and others as required by specific courses
Players:	QuickTime, Java Player, Java
Browser:	Chrome, IE, Safari, Edge, Firefox (all latest versions)
Display:	1024x768
Software:	Office 365 (2016)
Internet Connection:	FiOS/DSL/CABLE DSL/CABLE
Email Account:	New England Tech student email account
Sound Card:	Required
Other (some programs):	• A webcam (the one built into your laptop or iPad should be fine) • A microphone (built into the computer or headset is handy). • A digital camera (the one on a smart phone is fine).

Online students must be capable of installing and maintaining their own computer's hardware and software. New England Tech does not assist students with the setup of their computers.

Information about obtaining the software (if any) will be made available to you at the start of each course.

Note: Tablets and smartphones can be convenient for reading course materials and email but will not be sufficient for doing all of your course work.

9. How do I get assistance with technical issues?

New England Institute of Technology's online courses are designed to help acclimate you to technology and build your skills and your confidence as you go. We provide 24x7 support via phone, email or chat to help you with computer or online system issues in the learning management system. NEIT is unable to help students with computer problems. Tablet computers can be useful for doing course readings, watching course videos, and catching up on course discussions, but a tablet will not be sufficient for doing all your course work. Be sure you have regular access to a traditional laptop or desktop computer with appropriate capacity to support online assignments.

10. How large will my classes be?

The average size for a class is about 15 to 20 students; however, larger and smaller classes occur from time to time. As a member of the class you'll be learning as part of a connected community that provides support, challenges your thinking, and reminds you that you're not alone.

11. How long is an academic term?

Academic terms at New England Institute of Technology are 10-weeks long, with four terms offered per year, starting in January, April, July, and October.

12. How many courses do I have to take each term?

You can take one or two courses in any term. It's entirely up to your own needs and schedule. Note that if your employer offers tuition benefits, there may be a limit on how much they will reimburse. If you're planning to apply for federal financial aid, please confirm the minimum credit load required to qualify for federal financial aid with the Financial Aid Office.

13. Are there participation requirements?

Yes. Depending upon the course, each week you may be required to participate in various activities such as discussion boards or other similar assignments. All course activities will be counted towards your final grade. Required student participation will be identified in the course syllabus.

14. How will I submit my course assignments and take exams?

You will receive information from your professor regarding how to submit your assignments through the Canvas learning management system. Exams and test will be administered via the Canvas learning management system. In some cases, your professor may require a proctored exam. If a proctored exam is required, you will be required to submit a proctor form to your professor prior to gaining access to the exam. All tests, exams, and assignment requirements will be identified in the course syllabus at the beginning of each term.

15. Will my course be assigned to a faculty member?

Faculty are essential to the online learning experience at the New England Institute of Technology. All online courses in the MSCM program are taught by faculty with appropriate academic and professional credentials, as well as extensive practical experience. Additionally, all NEIT faculty teaching online courses receive specific training in online delivery methods.

16. How can I access specific course-related help when I need it?

Your professor will be available to you via email, Canvas discussion boards, and by phone. Responses to a question will generally be delivered within 24 hours. Preferred methods of contact as well as contact information will be identified at the beginning of each course in the course syllabus.

17. Will I be assigned an advisor?

Yes. Students in the MSCM program will be assigned a Student Advisor from the Office of Student Support Services. The New England Tech Student Advisor provides guidance, encouragement and support to students and is the primary point of contact for all student concerns and information about New England Tech policies and procedures.

18. Do I have access to other university services?

Online students have access to all university services including the Academic Skills Center, the Bookstore, the Career Services Office, the Financial Aid Office, the Registrar's Office, the Office of Student Support Services, Library, Student Accounts, the Office of Teaching and Learning and the Response Desk.

19. Do I need to maintain a specific grade point average?

Yes. You are required to maintain a cumulative grade point average of at least a 3.0 throughout the entire program. An individual course grade of C is considered passing. Students are required to repeat any course in which they received a final grade below a C.

20. Is NEIT accredited?

NEIT is accredited by the New England Commission of Higher Education (formerly the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges, Inc.). Accreditation by NECHE is recognized by the federal government and entitles NEIT to participate in federal financial aid programs. Some academic departments have specialized professional accreditations in addition to accreditation by NECHE. For more information on accreditation, see NEIT's catalog.

21. Can I transfer the credits that I earn at NEIT to another college?

The transferability of a course is always up to the institution to which the student is transferring. Students interested in the transferability of their credits should contact the Office of Teaching and Learning for further information.

22. Can I transfer credits earned at another college to NEIT?

Transfer credit for appropriate courses taken at an accredited institution will be considered for courses in which the student has earned a "B" or above. An official transcript from the other institution must be received before the end of the first week of the term for transfer credit to be granted for courses to be taken during that term. Students will receive a tuition reduction for the approved MSCM courses based on the program rate and will be applied against the final academic term of the curriculum's tuition amount. No tuition credit is provided for courses which are not a part of the curriculum.

Students may transfer no more than 4 credits (one course).

23. How many credits do I need to qualify for Financial Aid?

Students entering the MSCM program will be eligible for various forms of financial aid, including loans, if they take at least 4 credits per term.

24. How much does my program cost?

The cost of your program will be outlined in your enrollment agreement, along with your projected costs for textbooks and other course materials.

25. How do I purchase textbooks and other required materials?

Students may purchase their textbooks either through the Bookstore or through online merchants. Textbooks and other required materials will be identified by the professor in the course syllabus at the beginning of each term.

Technical Standards

These technical standards set forth by the Department of Design + Architectural Building Technology, establish the essential qualities considered necessary for students admitted to these programs to achieve the knowledge, skills and competencies to enter these fields. The successful student must possess the following skills and abilities or be able to demonstrate that they can complete the requirements of the program with or without reasonable accommodation, using some other combination of skills and abilities.

Cognitive Ability:

- Ability to interpret ideas and concepts visually and/or graphically
- Ability to learn, remember and recall detailed information and to use it for problem solving.
- Ability to deal with materials and problems such as organizing or reorganizing information.
- Ability to use abstractions in specific concrete situations.
- Ability to break information into its component parts.
- Ability to understand spatial relationships.
- Possession of basic math skills through addition, subtraction, multiplication and division of whole numbers and fractions using both the U.S. and metric systems of measurement.
- Ability to perform tasks by observing demonstrations.
- Possession of basic keyboarding skills and knowledge of computer programs.

Communications Skills:

- Ability to communicate effectively with faculty and students.
- Ability to demonstrate and use the knowledge acquired during the classroom training process and in the lab setting.

Adaptive Ability:

- Ability to maintain emotional stability and the maturity necessary to interact with other members of the faculty and students in a responsible manner.

Physical Ability:

- Ability to stand and/or sit for long periods of time.
- Ability to perform learned skills, independently, with accuracy and completeness.

Manual Ability:

- Sufficient motor function and sensory abilities to participate effectively in the classroom laboratory.
- Sufficient manual dexterity and motor coordination to coordinate hands, eyes and fingers in the use of the computer, plotter and other equipment.

Sensory Ability:

Visual

- Acute enough to enable the adjustment of drafting equipment
- Ability to properly distinguish colors.
- Acute enough to read small print.
- Acute enough to read small numbers on measuring instrument