# PROGRAM AND PROJECT MANAGEMENT

The program may be completed entirely on campus, entirely online, or through a combination of on-campus and online courses.

## **Admission**

Admission to the program as a regular student requires a BS in engineering, business, economics, math, computer science or other physical sciences and at least two years of practical work experience. The prerequisite for the program is the course work in probability and statistics that can be satisfied by completing IMSE 510 as part of approved electives within the first two semesters of the admission into the program. Two letters of recommendation, with at least one from a person familiar with the candidate's academic performance, are also required.

The undergraduate cumulative GPA is a large factor in master's admission consideration and typically 3.0 (on a scale of 4.0) is expected.

## **Advanced Standing**

Up to six graduate credit hours (grade of *B* or better) may be transferred from another accredited institution.

Students may transfer up to one-half (1/2) the minimum number of credit hours required for their master's or professional degree from another University of Michigan program.

Graduate Academic Policies can be found below:

http://catalog.umd.umich.edu/academic-policies-graduate/

## **Degree Requirements**

The Master of Science in Program and Project Management requires a minimum of 30 graduate credit hours.

Minimum Grade Requirement in addition to maintaining a minimum cumulative GPA of 3.0 or higher every semester.

- Courses in which grades of C- or below are earned cannot be used to fulfill degree requirements.
- A minimum of a 3.0 cumulative GPA or higher is required at the time of graduation.

## **Program Requirements**

The program of study must satisfy the following distribution and course requirements:

Code	Title	Credit Hours
Core (21 credit	hours)	
IMSE 515	Fundamentals of Program Mgt	3
IMSE 516	Project Management and Control	3
IMSE 517	Managing Global Programs	3
IMSE 5205	Eng Risk-Benefit Analysis	3
IMSE 5215	Program Budget, Cost Est & Con	3
EMGT 590	Capstone Project	3
OB 510	Organization Behavior	3

#### Electives (9 credit hours)

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Approved elective	es:	9
ACC 505	Devel & Interp Financial Info	
AENG 500	Automobile: An Integrated Syst	
CIS 565	Software Quality Assurance	
CIS 575	Software Engineering Mgmt	
EMGT 500	Management for Engineers	
EMGT 505	Systems Engineering	
EMGT 525	Tot Qua Mgmt and Six Sigma	
EMGT 520	Prod & Oper Engineering I	
EMGT 580	Mgt of Prod and Proc Design	
HCDE 501	Human Factors and Ergonomics	
HCDE 510	Foundation of HCDE	
HCDE 520	Research Methods in HCDE	
HCDE 530	Information Visualization	
HRM 561	Human Resource Management	
IMSE 501	Human Factors & Ergonomics	
IMSE 510	Probability & Statistical Mod	
IMSE 514	Multivariate Statistics	
IMSE 519	Quan Meth in Quality Engin	
IMSE 564	Applied Data Analytics and Modeling for Enterprise Systems	
IMSE 5655	Supply Chain Management	
IMSE 567	Reliability Analysis	
IMSE 570	Enterprise Information Systems	
IMSE 577	Human-Computer Interaction	
IMSE 5715	Modeling of Int Info Syst	
IMSE 5725	Object Oriented System Design	
IMSE 5755	Bus Proc Int using Entrpr Tech	
IMSE 588	Bldg High Perf Learning Org	
IMSE 593	Vehicle Package Engineering	
LE 523	Legal Environment for Managers	
MKT 515	Marketing Management	
OM 571	Supply Chain Management	
PAPP 505	Intro to Public Admin	
PAPP 520	Govt & Nonprofit Leadership	
Total Credit Hours		30

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Additional elective courses from other units in UM-Dearborn could also be considered with advisor's approval.

Thesis option may be elected with the approval of the graduate advisor which will count for six (6) credit hours of graduate coursework replacing capstone project (EMGT 590) and three (3) credit hours of elective coursework. Students electing a thesis option must elect at least one more graduate level cognate course in the place of EMGT 590 for a minimum of three credit hours from departments other than IMSE to satisfy.

This certificate provides practical knowledge in program and project management fundamentals. Topics include planning and organizing resources so that programs and projects are completed on schedule, on budget, and produce high-quality outcomes. The certificate is ideal for professionals who want to enhance their capabilities in managing complex projects and achieving cost-effective results. (12 credit hours)

Admission Requirements: Students who apply to this certificate program should have completed an undergraduate B.S. degree in Engineering, Business, Economics, Math, Computer Science or another physical science from an accredited institution and have at least two years of practical work experience. A probability & statistics course is a prerequisite for this certification program.

# **Program Requirements**

## **Required Core Course**

Code	Title	Credit
		Hours
IMSE 515	Fundamentals of Program Mgt	3
IMSE 516	Project Management and Control	3

### **Additional Coursework**

Code	Title	Credit Hours
Complete 2 co	ourses from the following (6 credits):	
IMSE 517	Managing Global Programs	3
IMSE 5205	Eng Risk-Benefit Analysis	3
IMSE 5215	Program Budget, Cost Est & Con	3

# **Learning Goals**

- Students will be able to demonstrate a comprehensive, theoretical, and practical knowledge of the foundation of program and project management.
- 2. Students will be able to describe advanced issues in the program management field.
- Students will be able to apply concepts, theories, methodologies, analytical techniques and skills necessary for successful leadership of programs within complex organizations.
- Students will develop an understanding of global issues on managing programs and projects.