## 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 <br> 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)

| Approved electives: |  |
| :---: | :---: |
| 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 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

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 <br> Hours |
| :--- | :--- | ---: |
| IMSE 515 | Fundamentals of Program Mgt | 3 |
| IMSE 516 | Project Management and Control | 3 |

## Additional Coursework

| Code | Title | Credit <br> Hours |
| :--- | :--- | ---: |
| Complete 2 courses 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

1. 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.
3. Students will be able to apply concepts, theories, methodologies, analytical techniques and skills necessary for successful leadership of programs within complex organizations.
4. Students will develop an understanding of global issues on managing programs and projects.
