

COLLEGE OF ENGINEERING

Masters Degrees

The College of Engineering offers three types of Master's curriculum: thesis, project or coursework-only. Students interested in research and a career in R&D may prefer the M.S. thesis option, while students who select the M.E. or M-IT degrees may be more interested in acquiring knowledge and applying it in their professional workplace.

- The Master of Science (M.S.) degree is completed either with a thesis or a project.
- The Master of Engineering (M.E.) degree is completed without the preparation of a formal research thesis or project and is based only on coursework.
- The Master of Information Technology (M-IT) degree is completed without the preparation of a formal research thesis or project and is based only on coursework.

A

- Aerospace Engineering - Master of Engineering in Aerospace Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/aerospace-engineering-master-engineering/>)
- Aerospace Engineering - Master of Engineering in Aerospace Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/aerospace-engineering-meae-online/>)
- Aerospace Engineering - Master of Science (<https://catalogs.nmsu.edu/nmsu/graduate-school/aerospace-engineering-master-science/>)

C

- Chemical Engineering - Master of Engineering in Chemical Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/chemical-engineering-master-engineering-chemical-engineering/>)
- Chemical Engineering - Master of Engineering in Chemical Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/chemical-engineering-master-engineering-chemical-engineering-online/>)
- Chemical Engineering - Master of Science in Chemical Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/chemical-engineering-master-science-chemical-engineering/>)
- Civil Engineering - Master of Engineering in Civil Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/civil-engineering-master-engineering/>)
- Civil Engineering - Master of Engineering in Civil Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/civil-engineering-mece-online/>)
- Civil Engineering - Master of Science in Civil Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/civil-engineering-master-science-civil-engineering/>)

E

- Electrical Engineering - Master of Engineering in Electrical Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/electrical-engineering-master-engineering-electrical-engineering/>)
- Electrical Engineering - Master of Engineering in Electrical Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/electrical-engineering-meee-online/>)

- Electrical Engineering - Master of Science in Electrical Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/electrical-engineering-master-science-electrical-engineering/>)
- Electrical Engineering - Master of Science in Electrical Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/electrical-engineering-msee-online/>)
- Engineering Management - Master of Engineering in Engineering Management (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/engineering-management-meem-online/>)
- Environmental Engineering - Master of Science in Environmental Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/environmental-engineering-master-science-environmental-engineering/>)

I

- Industrial Engineering (Systems Engineering) - Master of Engineering in Industrial Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/industrial-engineering-systems-engineering-meie-online/>)
- Industrial Engineering - Master of Engineering in Industrial Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/industrial-engineering-master-engineering/>)
- Industrial Engineering - Master of Engineering in Industrial Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/industrial-engineering-meie-online/>)
- Industrial Engineering - Master of Science in Industrial Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/industrial-engineering-master-science-industrial-engineering/>)
- Industrial Engineering - Master of Science in Industrial Engineering (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/industrial-engineering-msie-online/>)
- Information Technology (Cyber Defense) - Master of Information Technology (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/information-technology-cyber-defense-master-information-technology-online/>)
- Information Technology (IT Enterprise Management) - Master of Information Technology (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/information-technology-it-enterprise-management-master-information-technology-online/>)
- Information Technology - Master of Information Technology (Online) (<https://catalogs.nmsu.edu/global/nmsu-global/information-technology-mit-online/>)

M

- Mechanical Engineering - Master of Engineering in Mechanical Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/mechanical-engineering-master-engineering/>)
- Mechanical Engineering - Master of Science in Mechanical Engineering (<https://catalogs.nmsu.edu/nmsu/graduate-school/mechanical-engineering-master-science-mechanical-engineering/>)

Advanced Manufacturing - Concentration

The graduate concentration in advanced manufacturing educates students and creates a skilled workforce for the growing needs of new technologies and advanced products in the 21st century. The program provides hands-on experience on designing, adapting, and building parts using advanced materials by including new processes, changing the supply chain, and adapting business models. It also includes the design

optimization, materials selection and characterization, process parameter mapping, data analytics, software development, and final part inspection among other concepts. This concentration is maintained by the College of Engineering but is open to any Master's level major/degree.

Prefix	Title	Credits
Required Courses		
IE 575	Advanced Manufacturing Processes	3
IE 571	Advanced Quality Control	3
CE 510	Introduction to Nondestructive Testing	3
CHME 564	Polymer Science & Engineering	3
CHME 491/AGRO 450	Undergraduate Special Topics (AGRO 450 CHME 491 Development of Agricultural Technologies)	3
Electives		
5 Electives (Select 500 Level Courses from EE, CHME, IE, CE, or MAE) ¹		15
Total Credits		30

¹ With Approval of the advisor and instructor

Selection of Advisor

Newly admitted graduate students will be assigned a temporary advisor for the first semester, but they must select a degree option and permanent advisor before registering for the second semester.

In considering a decision about option and advisor, the student should arrange to meet with several members of the graduate faculty during the first six weeks of study to discuss specific educational objectives. The student can use these meetings to become familiar with faculty interests and research projects currently in progress. The faculty member must agree (in writing) to serve as the student's advisor.

Although there is no oral exam, students will be required to complete an exit-interview with one of Advanced Manufacturing concentration and one graduate faculty member from the master of engineering they select to study.