

Sample Plan of Study-Guidelines

Program of Study: Mechanical Engineering
Degree Objective: MS Non-thesis or Thesis

DEGREE REQUIREMENTS-GRADUATE COLLEGE

Requirement	s.h.	Comments re: requirement
<i>From GC Manual of Rules & Regs</i>	<i>If applicable</i>	
CUM GPA 2.75		
Minimum s.h. (thesis or non-thesis)	30	Refer to the Graduate College website and the Manual of Rules and Regulations for more information.
Maximum s.h. thesis credit allowed	9	
Final Exam (written, oral or both) if required		

DEGREE REQUIREMENTS-DEPARTMENT

Requirement	s.h.	Comments re: requirement
<i>Include required coursework and other POS requirements.</i>	<i>If applicable</i>	
CUM GPA 3.00		
		Students may design their program around a particular research and study area such as Design & Uncertainty Quantification; Fluid Dynamics; Heat Transfer & Combustion; Manufacturing & Materials; Robotics, Controls, and Autonomous Systems; Solid Mechanics & Multibody Dynamics by working with their advisor to determine appropriate graduate level coursework and sequence.
Minimum s.h. (non-thesis or thesis)	30	30 s.h. must be graduate level coursework; minimum of 12 s.h. must be from 5000 or higher Mechanical Engineering courses; may also select from 4100 or higher level Mechanical Engineering courses EXCEPT ME:4186 Enhanced Design Experience which is NOT eligible for graduate credit; and graduate transfer credits allowed upon approval. More information is included in the General Catalog and department website.
ENGR:7270 Engineering Ethics		All students must complete in Fall of Year 1
ME:6191 Graduate Seminar: Mechanical Engineering		Required attendance every fall/spring semester until degree completion
ME:6199 Research: Mechanical Engineering MS Thesis	6-9	Thesis option only
Final Exam - Non-thesis		Completion of degree requirements
Final Exam - Thesis		Oral thesis defense

ALLOWABLE GRADUATE TRANSFER CREDIT

	s.h.	Comments
Graduate transfer credits from another institution allowed by the department towards this POS		

Sample Plan of Study-Guidelines

Program of Study: _____ Mechanical Engineering
Degree Objective: _____ PhD

DEGREE REQUIREMENTS-GRADUATE COLLEGE

Requirement	s.h.	Comments re: requirement
<i>From GC Manual of Rules & Regs</i>	<i>If applicable</i>	
CUM GPA 3.00		
Minimum s.h. graduate work	72	Refer to the Graduate College website and the Manual of Rules and Regulations for more information.
Comprehensive Exam (written and oral)		
Maintain continuous post-comp registration		
Final Oral Exam		

DEGREE REQUIREMENTS-DEPARTMENT

Requirement	s.h.	Comments re: requirement
<i>Include required coursework and other POS requirements.</i>	<i>If applicable</i>	
CUM GPA 3.25		
		Students may design their program around a particular research and study area such as Design & Uncertainty Quantification; Fluid Dynamics; Heat Transfer & Combustion; Manufacturing & Materials; Robotics, Controls, and Autonomous Systems; Solid Mechanics & Multibody Dynamics by working with their advisor to determine appropriate graduate level coursework and sequence.

Minimum s.h. graduate coursework	72	72 s.h. must be graduate level coursework (42 s.h. taken at Iowa; a maximum of 30 s.h. of graduate transfer credits allowed upon approval. More information is included in the General Catalog and department website.
Required graduate coursework	42	A minimum of 42 s.h. (does not include thesis research) must be from courses taken beyond the B.S. degree. Of these, a minimum of 12 s.h. must be from 6000 and 7000 level Mechanical Engineering courses; may also select from 4100 or higher level Mechanical Engineering courses EXCEPT ME:4186 Enhanced Design Experience which is NOT eligible for graduate credit; ADDITIONALLY, ME:3179 Continuum Mechanics IS eligible for graduate credit; graduate transfer credits allowed upon approval. More information is included in the General Catalog and department website.
ENGR:7270 Engineering Ethics		All students must complete in Fall of Year 1
ME:6191 Graduate Seminar: Mechanical Engineering		Required attendance every fall/spring semester until degree completion
Minimum s.h. PhD thesis research	12	ME:7299 Research: Mechanical Engineering PhD Dissertation
Elective graduate coursework	18	Work with faculty advisor to determine appropriate graduate coursework and sequence; graduate transfer credits allowed upon approval.
Qualifying Exam		Successful completion of two qualifying exam (QE) courses taken in the first two semesters in the program. Must take ME:5113 Mathematical Method in Engineering plus one graduate level course in a focus area with a grade of A- or higher in each. Focus area courses are chosen in consultation with the faculty advisor from a specified list. More information is found in the General Catalog and department website.
Comprehensive Exam		Oral exam to be completed after passing the Qualifying Exam and upon completion of coursework in the specified area of study (not later than 28 months after entering the doctoral program). The exam will focus on the dissertation prospectus and related areas.
Maintain continuous post-comp registration		
Dissertation Prospectus		The student submits to the exam committee not later than two weeks before the comprehensive exam.
Final Oral Exam (Dissertation defense)		
ALLOWABLE GRADUATE TRANSFER CREDIT		
	s.h.	Comments
<i>Graduate transfer credits from another institution allowed by the department towards this POS</i>		
Maximum graduate transfer credits allowed	30	

Departmental Contacts for General Catalog and Sample Plan
Donna Palmer: 335- 5670

Graduate Programs of Study Mechanical Engineering

Master of Science in Mechanical Engineering (MS- and MS+)

Research and Study Areas: Design & Uncertainty Quantification; Fluid Dynamics; Heat Transfer & Combustion; Manufacturing & Materials;
Robotics, Controls, and Autonomous Systems; Solid Mechanics & Multibody Dynamics

PhD Mechanical Engineering

Research and Study Areas: Design & Uncertainty Quantification; Fluid Dynamics; Heat Transfer & Combustion; Manufacturing & Materials;
Robotics, Controls, and Autonomous Systems; Solid Mechanics & Multibody Dynamics