## Graduate Program Sheet, Department of Mechanical Engineering, U. of Hawai'i at Mānoa

Requirements	MS Plan A	MS Plan B	Ph.D.
Course credits	30 credits in 400- 700 level courses	30 credits in 400- 700 level courses	50 credits of 400-700 level courses beyond the BS degree (ME 800 does not count towards this requirement)
Required classes	1 credit ME 691 8 credits ME 700 12 credits in ME600 courses 9 credits in Technical Electives (400 or 600 level)	1 credit ME 691 2 credits ME 699 18 credits in ME600 courses 9 credits in Technical Electives (400 or 600 level)	<ul> <li>2 credits ME 691</li> <li>4 credits ME 699, taken in semester of Qualifying Exam</li> <li>5 credits ME 699, taken in semester of Comprehensive Exam, for only Direct PhD students</li> <li>21 credits taken before the Qualifying Exam, of which up to 9 credits can be Technical Electives (400 or 600 level)</li> <li>18 credits at the 600 level or higher</li> <li>For students with MS degrees, up to 30 credits from their MS programs may be applied towards filling the credit requirements with departmental approval. At least 20 additional credits are required:</li> <li>15 credits at 600 level or higher</li> <li>4 credits ME 699, taken in semester of Qualifying Exam</li> </ul>
Seminar	1 credit ME 691	1 credit ME 691	1 credit ME 691     2 credits ME 691, taken in 2 separate semesters     Direct Ph.D. students - 1 credit taken in the semester of the Qualifying Exam     Students with M.S. degrees - 1 credit taken during or before the semester of the Qualifying Exam
Research/thesis Credits	8 credits ME 700	2 credits ME 699	4 credits ME 699, taken in semester of Qualifying Exam 5 credits ME 699, taken in semester of Comprehensive Exam, for only Direct PhD students ≥ 1 credit ME 800
Qualifying exam	Not required	Not required	For students with M.S. in Mechanical Engineering, take exam by end of 2 <sup>nd</sup> semester For Direct Ph.D. students, take exam by end of 4 <sup>th</sup> semester
Form Thesis /Dissertation Committee	Before enrolling in ME 700; usually at end of 2 <sup>nd</sup> semester; submit MS Form II	Not required	Before Qualifying Exam
Comprehensive Examination	Not required	Not required	Take Comprehensive Examination after completing all required coursework Submit Ph.D. Form II after passing
Final Examination: Thesis/Dissertation Defense	Estimated end of 2 <sup>nd</sup> year	ME 699 Culminating experience required	Estimated end of fourth year Submit Ph.D. Forms III and IV after passing
Concentration	Declare concentration, choose one of the following:  • Materials and Manufacturing  • Mechanics, Systems, and Controls  • Thermal and Fluid Sciences		
Deficiency Courses	Depending on concentration, take additional undergraduate courses if equivalents not taken previously:  • Materials and Manufacturing: ME 331  • Mechanics, Systems, and Controls: ME 371 and ME 375  • Thermal and Fluid Sciences: ME 311 and ME 322		
Additional Requirements	Submit MS thesis to committee at least 2 weeks before final examination	Submit ME 699 final report to project examination committee at least 2 weeks before final examination	Submit dissertation to committee at least 2 weeks before final examination