

PhD in Engineering – Mechanics and Materials Emphasis (Entering with BS Degree)

Curriculum Checklist

Please refer to the program of study website below as your reference for course selection.

<https://engineering.uga.edu/degree/phd-engineering-mechanics-materials-emphasis/>

Student Name: _____

Student ID (810/811): _____ Term of Enrollment: _____

The Ph.D. in Engineering with Emphasis in Mechanics and Materials requires a minimum of 72 credit hours in the Program of Study beyond B.S. degree or a minimum of 42 credit hours beyond M.S. degree.

I already have MS Degree:

- Yes: Please use the “PhD in Engineering – Mechanics and Materials Emphasis (Entering with MS Degree)” checklist.
- No

Subject/ Number		Hours	Title	Semester	Approved Elective (Y/N)	Graduate only course (Y/N)	Need Course Sub. (Y/N)
Required Courses	ENGR 8950	1	Graduate Seminar*			Y	
	GRSC 7001	1	GradFIRST Seminar (UGA required)			Y	
Mechanics / Materials Elective (at least 9 credit hours)							
Additional Elective (at least 6 credit hours)							
Additional Graduate Only (at least 12 credit hours)							
Research Courses	ENGR 9000	23 (at least)	Doctoral Research	List Semesters and Credit Hours:			
	ENGR 9010		Project-Focused Doctoral Research	List Semesters and Credit Hours:			
	ENGR 9300	3	Doctoral Dissertation	List Semesters and Credit Hours:			

<p>Total Credit Hours (by adding all taken courses above – at least 72 hours + GradFIRST)</p>	<p style="text-align: center;">Credit Hours Requirement Guideline</p> <p>Students must complete:</p> <ol style="list-style-type: none"> 1. A minimum of 16 semester hours of coursework, which must include: <ul style="list-style-type: none"> ○ At least 15 hours of 8000- and 9000- level courses of which 9 hours must be selected from the Mechanics and Materials Course List. ○ 1 hour of ENGR 8950 Graduate Seminar (*Only up to 1 hours of ENGR 8950 may apply on the Program of Study if the student takes it more than once) 2. A minimum of 23 Doctoral Research hours (ENGR 9000 Doctoral Research or ENGR 9010 Doctoral project-focused research for students with an M.S). 3. 3 hours of ENGR 9300 Doctoral Dissertation 4. The University requires that students who are accepted to the Ph.D. program directly from a B.S. degree or who switch to a Ph.D. program before earning an M.S. degree must complete an additional 12 semester hours of University of Georgia courses open only to graduate students. <p>If you need course substitution, please complete and attach course substitution form. Course substitute form can be found at: https://engineering.uga.edu/students/graduate/ph-d-student-program-milestones/</p>
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Major Professor Signature: _____ Date: _____

ECAM (Mech, Ag) Graduate Coordinator (sign and date): _____ Date: _____

UGA CENGR Ph.D. in Engineering with Emphasis in Mechanics and Materials

MECHANICS AND MATERIALS EMPAHSIS COURSE LIST

- BIOE 8210 Multiscale Biomechanics
- BIOE 8490 Advanced Biomaterials
- CVLE(MCHE) 8160 Advanced Fluid Mechanics
- CVLE(MCHE) 8350 Nonlinear Finite Element Analysis
- CVLE(MCHE) 8640 Advanced Strength of Materials
- ENGR 8103 Computational Engineering
- ENGR 8130 Statistical Learning and Data Mining in Engineering
- ENGR 8180 Advanced Mass Transfer
- ENGR 8220 Microfluidic Transport Phenomena
- ENGR 8270 Computational Nanomechanics
- INFO 8750 Advance Programming for Data Mining
- ENGR 8130 Statistical Learning and Data Mining in Engineering
- ENGR 8910 Foundations for Engineering Research
- MCHE 8170 Advanced Heat Transfer
- MCHE 8250 Combustion Science
- MCHE 8380 Continuum Mechanics
- MCHE 8500 Technical Foundations of Energy for Policy Practitioners
- MCHE 8650 Aerosol Science and Engineering
- MCHE 8710 Engineering Properties of Animal and Plant Materials: Form and Function
- MCHE 8850 Gas Dynamics
- MCHE 8970 Combustion Science
- PHYS 8601 Computer Simulation Methods in Physics
- PHYS 8602 Computer Simulations of Materials