MECHANICAL ENGINEERING

IMPACTING THE WORLD ONE DISCOVERY AT A TIME

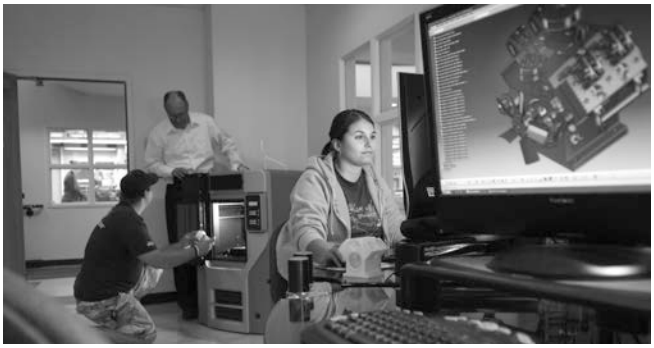
Academic Plan for 2015/16

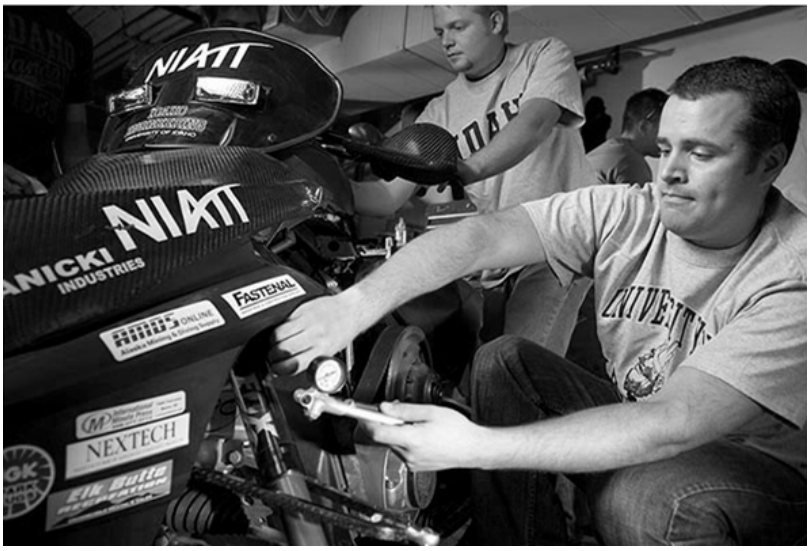
What can you do as a Mechanical Engineer?

Mechanical engineers utilize various technologies to improve or invent engine systems, hybrid electric vehicles, alternative fuels, robots, jet engines, prosthetic limbs, structures, and power generating plants to recreate the way we live from day to day. Mechanical engineers work in industry, consulting firms, universities, and government research labs.

As a mechanical engineer you can create new solutions and innovations. By using scientific methods to develop and refine a new concept, you will create products that are reliable, while taking into consideration cost, safety, and manufacturability.

At the University of Idaho you will find professors who are recognized leaders in innovative teaching methods and the use of applied design projects. Our faculty and staff will help you focus on your professional and personal development.





Undergraduate Program

As a mechanical engineering major your courses will include engineering sciences, physical sciences, mathematics, communications, humanities, and social sciences. Specialized courses in thermal sciences and applied mechanics are available.

Your instructors will encourage you to develop individual interests through the selection of technical electives and to develop your creative ability in design and synthesis of components and systems.

Our mission is to prepare students for entry into professional engineering practice and advanced study through our regionally-recognized program of high-quality instruction, integrated design and laboratory experience, and scholarship.

University of Idaho
College of Engineering

Department of Mechanical Engineering
208.885.6579 or 88-88-UIDAHO ext. 6579
medept@uidaho.edu

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FRESHMAN - FALL			FRESHMAN - SPRING		
ENGL 102	College Writing and Rhetoric **ENGL 101 or sufficient test scores**	3	MATH 175	Analytic Geometry & Calculus II **Math 170**	4
MATH 170	Analytic Geometry & Calculus I **Math 143 & 144 or sufficient test scores**	4	PHYS 211	Engineering Physics I (with lab) *Math 170*	4
ME 123	Intro to Mechanical Engineering Design *Math 170*	3	CHEM 111	Principles of Chemistry I **Chem 050 or permission**	4
COMM 101	Fundamentals of Public Speaking	2	ENGR 210	Engineering Statics **Math 170**	3
ISEM 101	Integrated Seminar	3			
	Total Credits	**15**		**Total Credits**	**15**
SOPHOMORE - FALL			**SOPHOMORE- SPRING**		
MATH 310	Ordinary Differential Equations **Math 175 (recommended Math 275)**	3	MATH 275	Analytic Geometry & Calculus III **Math 175**	3
MSE 201	Engineering Materials (Fall Only) **Chem 111**	3	ME 322	Thermodynamics **Chem 111 Phys 211**	3
PHYS 212	Engineering Physics II (with lab) **Phys 211** *Math 175*	4	ENGR 220	Engineering Dynamics **ENGR 210**	3
ME 223	Mechanical Design Analysis **ME 123** *Math 175*	3	ENGR 240	Introduction to Electrical Circuits **Phys 211 Math 175**	3
ENGR 350	Engineering Mechanics of Materials **ENGR 210 Math 175** *Math 310*	3	ME 301	Computer Aided Design Methods **ME 223**	3
	Total Credits	**16**	ISEM 301	Great Issues Seminar **ENGL 102 and Sophomore standing**	1
				Total Credits	**16**
JUNIOR - FALL			**JUNIOR – SPRING**		
ME 341	Intermediate Mechanics (Fall Only) **ME 301 & certification** *MSE 201*	3	ME 325	Machine Component Design I (Spring Only) **MSE 201 ME 341**	3
ME 313	Dynamic Modeling of Engr. Systems **ME 223 ENGR 220 & 240 Math 310** *Math 330*	3	ME 345	Heat Transfer **Math 310 ME 322** *ENGR 335*	3
ENGR 335	Engineering Fluid Mechanics **ENGR 210 Math 275**	3	ME 330	Experimental Method for Engineers	3
Math 330	Linear Algebra **Math 170**	3	PHIL 103	Ethics	3
ECON	Economics Elective (201, 202, or 272)	3/4	ELECTIVE	Technical Elective	3
ELECTIVE	Statistics/Physics/Math	3	ELECTIVE	Technical Elective	
	Total Credits	**18/19**		**Total Credits**	**18**
SENIOR - FALL			**SENIOR- SPRING**		
ME 424	Mechanical Systems Design (Fall Only) **ME 313 325 330 & 345**	3	ME 426	Mechanical Systems Design II (Spring Only) **ME 424**	3
ME 430	Senior Lab **ME 330 & 313**	3	CE 411	Fundamentals of Engineering Review **Sr. Standing or Permission**	1
ME 435	Thermal Energy Systems Design **ME 345**	3	ELECTIVE	Technical Elective **Sr. Standing**	3
ENGL 317	Technical Writing ***ENGL 102 and Jr. Standing**	3	ELECTIVE	Technical Elective	3
ELECTIVE	Humanities/Social Science Elective	3	ELECTIVE	Humanities/Social Science Elective	3
	Total Credits	**15**		**Total Credits**	**13**

- See course catalog for complete degree requirements and additional information.

***Courses in bold are prerequisites**

***Courses in italics are co-requisites*

Updated 6/30/15