

Engineering Dual Degree Requirements

Motorsports Engineering & Science, Technology and Society

University Core Curriculum			Common Engineering		
Common Core Requirements			Mathematics		
FYS	101	First Year Seminar	Credits	MA	106 Calculus & Analytical Geometry 1
			3		4
FYS	102	First Year Seminar	3	MA	107 Calculus & Analytical Geometry 2
					4
GHS	201-209	Global and Historical Studies	3	MA	208 Calculus & Analytical Geometry 3
					4
GHS	201-209	Global and Historical Studies	3	MA	215 Linear Algebra
					3
				MA	334 Differential Equations
					3
General Core Requirements			Science		
TI	Text and Ideas (TI 244-PL) ¹		Credits	CH	105 General Chemistry 1**
			3		5
PCA	Perspectives in the Creative Arts		3	CH	106 General Chemistry 2**
					5
SW	<i>The Social World (exempt)</i>		3	PH	201 Introduction to Analytical Physics 1**
					5
AR	<i>Analytical Reasoning (exempt)</i>		3	PH	202 Introduction to Analytical Physics 2**
					5
NW	<i>The Natural World (exempt)</i>		5		
PWB	Physical Well-Being		1		
		Core Credits	19(30)	Engineering	
Additional Core Requirements			Other		
BCR	Butler Cultural Requirement		8 events	DD	190 Elementary Engineering Design
					3
ICR	Indianapolis Community Requirement		1 course	DD	297 MATLAB
					1
SAC	Speaking Across the Curriculum		1 course	CS	142 Intro to Computer Science & Prog
					3
WAC	Writing Across the Curriculum		1 course		
Liberal Arts and Science Requirements			Engineering		
Foreign Language (min 6 cr 200 level or above)			Credits	COM	101 Rhetoric and the American Demo
			6-14		3
				TCM	250 Career Planning for Engineers
					1
				TCM	360 Comm in Engineering Practice (WAC/SAC)
					2
				ENGR	200 Engineering Internship
					1
		Credits	25-33		
					Credits
					52
Science, Technology and Society			Motorsports Engineering		
ST	200	Intro to Science & Technology Studies	Credits	PHIL	120 Ethics ¹
			3		-
ST	205	Science and Society Speaker Series	3	PH	351 Analog Electronics (WAC)
					4
		This is a one credit course offered each term that must be completed three times before graduation.		MA	359 Probability and Statistics
					3
		Select 2 from the following 3 courses:	6	ME	200 Thermodynamics
					3
ST	310	Social Studies of Science and Technology		ME	270 Basic Mechanics I
					3
ST	320	Philosophy of Science		ME	272 Mechanics of Materials
					3
ST	330	Language, Rhetoric and Science		ME	274 Basic Mechanics II
					3
STS Electives (*credits used toward 18 cr req)			18	ME	310 Fluid Mechanics
					3
		Elective courses are from various departments.		ME	325 Fluid Lab
					1
		Of these credits, 12 must be at the 300 level or above. A total of three hours of independent study or internship credit can be used. Only one research methods course is allowed.		ME	344 Intro to Engineering Materials
					3
				ME	482 Control Systems
					3
				MET	338 Manufacturing Processes
					4
				MSTE	272 Introduction to Motorsports
					3
				MSTE	297 Modeling for Motorsports
					2
				MSTE	298 Computer Modeling & Programming
					2
				MSTE	312 Business of Motorsports
					3
				MSTE	317 Motorsports Practicum II
					1
				MSTE	320 Motorsports Design I
					3
				MSTE	330 Data Acquisition in Motorsports I
					2
				MSTE	331 Data Acquisition in Motorsports II
					3
				MSTE	340 Dynamic Systems and Signals
					3
				MSTE	350 Comp Aided Design & Analysis
					3
				MSTE	414 Motorsports Design II
					3
				MSTE	417 Motorsports Practicum III
					1
				MSTE	426 Internal Combustion Engines
					3
				MSTE	472 Vehicle Dynamics
					3
				MSTE	482 Motorsports Aerodynamics
					3
				Tech Electives	6
					Credits
					77
184 - 192 Total Credits					

¹ used as equivalents for degree requirements