

Engineering Dual Degree Requirements

Motorsports Engineering & Environmental Studies

University Core Curriculum				Common Engineering			
Common Core Requirements				Mathematics			
FYS	101	First Year Seminar	Credits	MA	106	Calculus & Analytical Geometry 1	Credits
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
General Core Requirements				Science			
TI	Text and Ideas (TI 244-PL) ¹		Credits	CH	105	General Chemistry 1	Credits
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	Engineering			
PWB	Physical Well-Being		1	DD	190	Elementary Engineering Design	Credits
			Core Credits	DD	297	MATLAB	3
			19(30)	CS	142	Intro to Computer Science & Prog	1
Additional Core Requirements				Other			
BCR	Butler Cultural Requirement		8 events	COM	101	Rhetoric and the American Demo	Credits
ICR	Indianapolis Community Requirement		1 course	TCM	250	Career Planning for Engineers	3
SAC	Speaking Across the Curriculum		1 course	TCM	360	Comm in Engineering Practice (WAC/SAC)	1
WAC	Writing Across the Curriculum		1 course	ENGR	200	Engineering Internship	2
Liberal Arts and Science Requirements							
Foreign Language (min 6 cr 200 level or above)			Credits				
Spanish, French, German, Chinese, Latin			6-14				
			Credits				
			25-33				
Environmental Studies				Motorsports Engineering			
ENV	200	Introduction to Environmental Studies	Credits	PHIL	120	<i>Ethics</i> ¹	Credits
ST	200	Intro to Science & Technology Studies	3	PH	351	Analog Electronics (WAC)	-
ST	205	Science and Society Speaker Series	3	MA	359	Probability and Statistics	4
This is a 1 credit course to be taken 3 times.				ME	200	Thermodynamics	3
ENV	330	Geographic Information Systems	4	ME	270	Basic Mechanics I	3
Select 1 of the following 3 courses:			3	ME	272	Mechanics of Materials	3
ST	310	Social Studies of Science and Technology		ME	274	Basic Mechanics II	3
ST	320	Philosophy of Science		ME	310	Fluid Mechanics	3
ST	330	Language, Rhetoric and Science		ME	325	Fluids Lab	1
Practical Experience			3	ME	344	Intro to Engineering Materials	3
Satisfied by ENV 400, an approved community-based internship, or another experiential learning course as approved.				ME	482	Control Systems	3
STS Electives (*credits used toward 15 cr req)			15	MET	338	Manufacturing Processes	4
Of these credits 12 must be at the 300-400 level, 6 must be social science related, and 6 must be humanities related. Three hours of independent study/internship credit can be used. One research methods course is allowed.				MSTE	272	Introduction to Motorsports	3
Natural Science Courses			5	MSTE	297	Modeling for Motorsports	2
BI	230	Ecology and Evolutionary Biology		MSTE	298	Computer Modeling & Programming	2
NW	207	Ecology and the Natural Environment		MSTE	312	Business of Motorsports	3
CH	105	<i>General Chemistry 1</i>	-	MSTE	317	Motorsports Practicum II	1
CH	106	<i>General Chemistry 2</i>	-	MSTE	320	Motorsports Design I	3
			Credits	MSTE	330	Data Acquisition in Motorsports I	2
			39	MSTE	331	Data Acquisition in Motorsports II	3
193 - 201 Total Credits				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

¹ used as equivalents for degree requirements