

**TO:** The Faculty of the College of Engineering

**FROM:** The Faculty of the School of Mechanical Engineering

**RE:** Updates to the BS in Motorsports Engineering Plan of Study

The Faculty of the School of Mechanical Engineering has approved the following updates to the BSMSPE plan of study. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**Background:** The School of Mechanical Engineering has approved the implementation of the plan of study associated with the Bachelor of Science Degree in Motorsports Engineering.

The original plan of study as proposed and approved is included with this document.

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Christopher E Finch  
Site Director Motorsports Engineering  
Professor of Engineering Practice Mechanical Engineering

School of Mechanical Engineering, Purdue University

Student ID:

Student Name:

Program Entry Date:

Degree/Program Plan: B.S. Motorsports Engineering  
 Program/Plan Code:  
 Requirement Term:

**1st Semester**

Course#	Units	Title
MA 16500	4	Diff Calculus
ENGR 13100	2	Ideas to Innovation I
CHEM 11500	4	Gen Chem
WC Elective	3	Written Communication Elective
Gen Ed Elec	3	Gen Ed Elective I

Credit Hours 16

**2nd Semester**

Course#	Units	Title
MA 16600	4	Integ Calculus
PHYS 17200	4	Modern Physics
ENGR 13200	2	Ideas to Innovation II
OC Elective	3	Oral Communication Elective
SCI Elec	3	Science Elective

Credit Hours 16

**3rd Semester**

Course#	Units	Title
MA 26100	4	Multivariate Calculus
ME 27000	3	Statics
MSPE 29701	2	Motorsports Intro to Modeling
MSPE 29000	1	Seminar
MSPE 29800	2	Motorsport Programming
Gen Ed Elec	3	Gen Ed Elective II

Credit Hours 15

**4th Semester**

Course#	Units	Title
MA 26200	4	Linear Alg & Differential Eq
ECE 20001	3	Electrical Engineering Fundamentals I
ECE 20007	1	Electrical Engineering Fundamentals Lab
ME 20000	3	Thermodynamics I
ME 26400	3	Intro to Manufacturing & Design
ME 27400	3	Dynamics

Credit Hours 17

**5th Semester**

Course#	Units	Title
ME 32300	3	Mechanics of Materials
ME 32301	1	Mechanics of Materials Lab
ME 36500	3	Measurment & Control Systems I
MSPE 33000	3	System Engineering in Motorsports
MSPE 35000	3	Computer Aided Design and Analysis
MSPE 47200	3	Vehicle Dynamics

Credit Hours 16

**6th Semester**

Course#	Units	Title
ME 30800	3	Fluid Mechanics
MSPE 37500	3	Motorsports Control Systems
MSPE 31700	1	Practicum I
MSPE 32000	3	Motorsports Design I
World Elec	3	World Cultural Elective
Econ Elec	3	Econ Elective

Credit Hours 16

**7th Semester**

Course#	Units	Title
ME 30801	1	Fluid Mechanics Lab
MSPE 48200	3	Vehicle Aerodynamics
MSPE 42600	3	Motorsports Powertrain
MSPE 41700	1	Practicum II
MSPE Elec	3	MSPE Elective
MSPE/ME Tec	3	MSPE/ME Tech Elective
Gen Ed Elec	3	Gen Ed Elective III

Credit Hours 17

**8th Semester**

Course#	Units	Title
MSPE 41400	3	Motorsports Design II
MSPE 43100	3	Race Engineering
MSPE Elec	3	MSPE Elective
MSPE/ME Tec	3	MSPE/ME Tech Elective
Gen Ed Elec	3	Gen Ed Elective IV

Credit Hours 15

Total Credit Hours for BS in Motorsports Engineering 128

Student ID:

Student Name:

Program Entry Date:

Degree/Program Plan: B.S. Motorsports Engineering  
 Program/Plan Code:  
 Requirement Term:

**Engineering Core Course Requirements**

Course#	Units	Term	Grade	Pre-requisites	Comments
ECE 20001	3			C: MA26100, ME 27400	
ECE 20007	1				
ENGR 13100	2				
ENGR 13200	2			P: ENGR 13100	
ME 20000	3			P: CHEM 11500	
ME 27000	3			P: PHYS 17200, C: MA 26100, ME 20000	
ME 26300	3				
ME 27400	3			P: ME 27000	
ME 30800	3			P: ME 20000	
ME 30801	1			C: ME30800	
ME 32300	3			P: ME 27000	
ME 32301	1			C: ME 32300	
ME 36500	3			P: MA 26200, ECE 20001, 20007, ME 274000	
MSPE 29000	1			P: WC1, OC1	
MSPE 29700	2			C: ME 27000	
MSPE 29800	2			P: MA 16600	
MSPE 31700	1			P: MSPE 35000 and Junior Standing	
MSPE 32000	3			P: MSPE 35000, MSPE 47200, ME 32300	
MSPE 33000	3			C: ECE20001 & 20007, ME 36500	
MSPE 35000	3			P: MSPE 29701 C: MSPE 32300	
MSPE 37500	3			P: MSPE 29800, ME 36500	
MSPE 41400	3			P: MSPE 32000, C: MSPE 48200	
MSPE 41700	1			P: MSPE 31700 and Senior Standing	
MSPE 42600	3			P: MSPE 33000, ME20000	
MSPE 43100	3			P: MSPE 33000, MSPE 47200	
MSPE 47200	3			P: ME 27400	
MSPE 48200	3			P: MSPE 47200, ME 30800	

ECE Credits 4  
 ENGR Credits 4  
 ME Credits 23  
 MSPE Credits 34  
 Total 65

**Math and Science Requirements**

Course#	Units	Term	Grade	Pre-requisites	Comments
MA 16500	4				
MA 16600	4				
MA 26100	4				
MA 26200	4				
PHYS 17200	4				
CHEM 11500	4				

Total: 24

**General Education Electives**

Course#	Units	Term	Grade	Pre-requisites	Comments
WC Elec	3				
OC Elec	3				
CS 15900	3				
Gen Ed Elec	3				
Gen Ed Elec	3				
Gen Ed Elec	3				
Gen Ed Elec	3				
Econ Elec	3				
World Ctr Elec	3				

Total: 27

**Technical Electives**

Course#	Units	Term	Grade	Pre-requisites	Comments
MSPE Tech	6				
MSPE/ME Tech	6				

Total: 12

Total Credit Hours for BS in Motorsports Engineering 128