The Distribution of Credit Hours by Semester for BSME and BSMSTE Degrees  
Fall 2013 Students

**First Year**

*First Semester (17 cr.)*
- CHEM C105 Chemical Science I (3 cr.)
- COMM R110 Fundamentals of Speech Communication (3 cr.)
- ENGR 195: Introduction to the Engineering Profession (1 cr.)
- ENGR 196: Introduction to Engineering (3 cr.)
- MATH 165 Integrated Calculus and Analytic Geometry I (4 cr.)  
  [P: Placement]
- MSTE 27200: Intro to Motorsports (3 cr.)  
  [P: none]

*Second Semester (17 cr.)*
- ENG W13100 Elementary Composition I (3 cr.)
- ENGR 19700 Introduction to Programming Concepts (2 cr.)  
  [C: MATH 16500]
- MATH 16600 Integrated Calculus and Analytic Geometry II (4 cr.)  
  [P: MATH 16500]
- PHYS 15200 Mechanics (4 cr.)  
  [C: MATH 16600]
- MATH 17100 Multidimensional Mathematics (3 cr.)  
  [C: MATH 16500]
- MSTE 29700 Computer Modeling for Motorsports (1 cr)  
  [P: none]

**Second Year**

*Third Semester (18 cr.)*
- MATH 26100 Multivariate Calculus (4 cr.)  
  [P: MATH 16600, MATH 17100]
- ME 20000 Thermodynamics I (3 cr.)  
  [P: PHYS 15200; C: MATH 26100]
- ME 27000 Basic Mechanics I (3 cr.)  
  [P: PHYS 15200; C: MATH 26100]
- PHYS 25100 Heat, Electricity, and Optics (5 cr.)  
  [P: PHYS 15200]
- ENGR 29700 Matlab (1 cr)  
  [P: ENGR 19700]
- MSTE 29800 Computer Programing for Motorsports (2 cr.)  
  [P: none]
Fourth Semester (16 cr.)
General Education Elective- Cultural Understanding (3 cr.)
ECE 204 Introduction to Electrical and Electronic Circuits (4)
   [C: PHYS 251]
MATH 26600 Linear Algebra and Differential Equations (3 cr.)
   [P: MATH 166]
ME 26200 Engineering Design, Ethics and Entrepreneurship (3 cr.)
   [P: ME 27000; C: ENGR 29700]
ME 27400 Basic Mechanics II (3 cr.)
   [P: ME 27000; C: MATH 26600]

Third Year

Fifth Semester (17 cr.)
ME 27200 Mechanics of Materials (3 cr.)
   [P: ME 270]
ME 31000 Fluid Mechanics (4 cr.)
   [P: ME 20000, MATH 26600, C: ME 27400]
ME 33000 Modeling and Analysis of Dynamic Systems (3 cr.)
   [P: MATH 266, ECE 204]
ECON E201 Introduction to Microeconomics OR ME 32700 Engineering Economics (3 cr.)
MSTE 35000 Computer Aided Design & Manufacturing (3 cr.)
   [P: MSTE 29700]
MSTE 21700 Motorsports Practicum I (1 cr.)
   [P: none]

Sixth Semester (17 cr.)
ME 31400 Heat and Mass Transfer (4 cr.) (MSTE Tech. Elect.)
   [P: ME 310]
ME 34000 Dynamic Systems and Measurements (3 cr.)
   [P: ME 330]
ME 37200 Design of Mechanisms (3 cr.)
   [P: ME 26200, ME 27200, ME 27400]
MET 33800 Manufacturing Processes (4 cr.)
   Restricted Elective (3 cr.)

Fourth Year

Seventh Semester (17 cr.)
ME 34400 Introduction to Engineering Materials (3 cr.)
   [P: Junior Standing]
MSTE 48200 Motorsports Aerodynamics (3 cr.) (ME Sci/Tech Elective)
   [P: MSTE 35000]
MSTE 33000 Data Acquisition in Motorsports I (3 cr.)
   [P: ECE 20400]
ME 48200 Control Systems Analysis and Design (3 cr.)  
[P: ME 33000]
MSTE 31700 Motorsports Practicum II (1 cr)  
[P: MSTE 21700]
Statistics Elective (Stats 350) (3 cr.)  
[P: Junior Standing]
ME 39700 Mechanical Engineering Lab (1 cr.)

Eighth Semester (14 cr.)
MSTE 32000 Motorsports Design I (3 cr.)  
[P: ME270, ME274, MSTE 29700, MSTE 31000]
MSTE 33100 Data Acquisition in Motorsports II (3 cr.)  
[P: MSTE 33000, MSTE34000]
MSTE 31200 Business of Motorsports (4 cr.)  
[P: MSTE 27200]
ME 41400 Thermal-Fluid Systems Design OR ME 49700 Machine Design (3 cr.)  
(MSTE Tech. Elect.)
MSTE I41000 Internship (1 cr.)

Fifth Year

Ninth Semester (12 cr.)
MSTE 472000 Vehicle Dynamics (3 cr.) (ME Tech. Elect.)  
[P: ME270, ME274] [P: Senior Standing]
TCM 36000 Communication in Engineering Practice (2 cr.)  
[P: ENG W131, COMM R110]
MSTE 41700 Motorsports Practicum III (1 cr)  
[P: MSTE 31700]
General Education Elective – Social Sciences (3 cr.)  
ME TECH Elective (3 cr.)

Tenth Semester (13 cr.)
General Education Elective – Arts & Humanities (3 cr.)
ME 462 Engineering Design (3 cr.)  
[P: ME 34400, ME 37200; C: ME 41400, ME 48200, ME40500]
MSTE 42600 Internal Combustion Engines (3 cr.) (ME Tech Elective)  
[P: ME20000]
ME 40500 FE Exam Prep. & Seminar (1 cr.)
General Education Elective – Philosophy P-120 (3 cr.)

Total Credits = 158