New Course Request

Indiana University

Indianapolis Campus

Check Appropriate Boxes: Undergraduate credit [ ] Graduate credit [ ] Professional credit [ ]

1. School/Division: School of Engineering & Technology

2. Academic Subject Code: MSTE

3. Course Number: 49900

4. Instructor: Pete Hylton

5. Course Title: Motorsports Engineering Special Topics

Recommended Abbreviation (Optional) (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Spring 2010

7. Credit Hours: Fixed at ________ or Variable from ________ 1 to 3 ________

8. Is this course graded S-F (only)? Yes _____ No _____ X

9. Is variable title approval being requested? Yes _____ No _____ X

10. Course description (not to exceed 50 words) for Bulletin publication:

P: Permission of instructor. This is a special topics course for students wishing to pursue additional motorsports studies under the direction of a faculty advisor.

11. Lecture Contact Hours: Fixed at ________ or Variable from ________ to ________

12. Non-Lecture Contact Hours: Fixed at ________ or Variable from ________ 1 to 3 ________

13. Estimated enrollment: ________ of which ________ percent are expected to be graduate students.

14. Frequency of scheduling: ________ Will this course be required for majors? ________ no ________

15. Justification for new course: ________ Part of the already approved BS in Motorsports Engineering ________

16. Are the necessary reading materials currently available in the appropriate library? ________ yes ________

17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitters: [Signature]
Date: 9-12-04

Dean of Graduate School (when required) [Signature]
Date: [ ]

Chancellor/Vice-President [Signature]
Date: 9-14-04

University Enrollment Services [Signature]
Date: [ ]

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 724

University Enrollment Services
Chancellor/Vice-President: [Signature]
School Division: [Signature]
Department Division: [Signature]
University Enrollment Services: [Signature]
PURDUE SCHOOL OF ENGINEERING & TECHNOLOGY
OUTCOMES AND ASSESSMENT DATA SHEET

This is an internal document to identify and record expected outcomes and
anticipated assessment strategies for all courses taught within the School of Engineering
and Technology. Submission of this form, as noted below, is required and must
accompany all new course and course change requests. Copies of this form should also be
retained within the department and kept on file with the outline or syllabus for each course.

Course Number: MSTE 49900  Course Title: Motorsports Engineering Special Topics

Procedure:

First, identify all instructional outcomes expected for this course, and then select all ABET
outcomes which are consistent with those anticipated objectives from TABLE 1 below.

<table>
<thead>
<tr>
<th>TABLE 1: ABET OUTCOMES</th>
</tr>
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<tbody>
<tr>
<td>ENGINEERING - EAC Criterion #3</td>
</tr>
<tr>
<td>An ability to apply knowledge of mathematics, science, and engineering</td>
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<td>An ability to design and construct experiments as well as to analyze and interpret data.</td>
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<td>An ability to design a system, component, or process to meet desired needs.</td>
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<td>An ability to function on multi-disciplinary teams.</td>
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<td>An ability to identify, formulate and solve engineering problems.</td>
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<td>An understanding of professional and ethical responsibility.</td>
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<td>An ability to communicate effectively.</td>
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<td>The broad education necessary to understand the impact of engineering solutions in global societal context.</td>
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<td>A recognition of the need for and ability to engage in life-long learning.</td>
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<tr>
<td>A knowledge of contemporary issues.</td>
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<tr>
<td>An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.</td>
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</tbody>
</table>

Subsets for each of the six IUPUI Principles of Undergraduate Learning (PUL) are given on
the reverse side in TABLE 2. Using a number corresponding to each ABET outcome
identified from TABLE 1 above to select a column, place a "O" or "X" mark in the applicable
TABLE 2 row(s) cell for each PUL. Courses will often address multiple ABET outcomes
and ABET outcomes frequently will overlap more than one PUL subset. Thus, it is
expected completed data sheets may contain marks in several cells thereby indicating the
course simultaneously satisfies multiple Principles of Undergraduate Learning while
fulfilling its intended ABET objective(s).

After completing TABLE 2, briefly define or explain how the course outcomes or objectives
will be evaluated within the context of the departmental assessment program in the space
below:

Students in this course will be evaluated by individual assignments on pertinent topics

Submitted By: Pete Hylton  Date: 8/15/09
## TABLE 2 - MATRIX OF EXPECTED COURSE OUTCOMES

(Suggestion - while completing Table 2, place a copy of the ABET outcomes from Table 1 along side for easy cross referencing.)

<table>
<thead>
<tr>
<th>PRINCIPLES OF UNDERGRADUATE LEARNING</th>
<th>ENGINEERING OUTCOMES - EAC CRITERIA #3: ITEMS (a) to (k)</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
<th>h</th>
<th>i</th>
<th>j</th>
<th>k</th>
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<tbody>
<tr>
<td>1(a) - Express ideas and facts effectively in written formats</td>
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<td>1(b) - Comprehend, interpret, and analyze texts</td>
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<td>1(c) - Communicate orally in one-on-one and group settings</td>
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<td>1(d) - Solve problems that are quantitative in nature</td>
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<td>1(e) - Make efficient use of information resources and technology for personal and professional needs</td>
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<td>2(a) - Analyze complex issues and make informed decisions</td>
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<td>2(b) - Synthesize information in order to arrive at reasoned conclusions</td>
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<td>2(c) - Evaluate the logic, validity, and relevance of data</td>
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<td>2(d) - Solve challenging problems</td>
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<td>2(e) - Use knowledge and understanding to generate and explore new questions</td>
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<td>3(a) - Apply knowledge to enhance personal lives</td>
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<td>3(b) - Apply knowledge to meet professional standards and competencies</td>
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<td>3(c) - Apply knowledge to further the goals of society</td>
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<td>4(a) - Demonstrate substantial knowledge and understanding of at least one field of study</td>
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<td>4(b) - Compare and contrast approaches to knowledge in different disciplines</td>
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<td>4(c) - Modify their approach to an issue or problem based on the contexts and requirements of particular situations</td>
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<td>5(a) - Compare and contrast the range of diversity and universality in human history, societies, and ways of life</td>
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<td>5(b) - Analyze and understand the interconnectedness of global and local concerns</td>
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<td>5(c) - Operate with civility in a complex social world</td>
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<td>6(a) - Make informed and principles choices regarding conflicting situations in their personal and public lives and to foresee the consequences of these choices</td>
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<td>6(b) - Recognize the importance of aesthetics in their personal lives and to society</td>
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**PURDUE UNIVERSITY**  
REQUEST FOR ADDITION, EXPIRATION,  
OR REVISION OF AN UNDERGRADUATE COURSE  
(100-400 LEVEL)  

**DEPARTMENT**: Motorsports Engineering  
**EFFECTIVE SESSION**: Spring 2010  

**INSTRUCTIONS**: Please check the items below which describe the purpose of this request.

- [ ] 1. New course with supporting documents  
- [ ] 2. Add existing course offered at another campus  
- [ ] 3. Expiration of a course  
- [ ] 4. Change in course number  
- [ ] 5. Change in course title  
- [ ] 6. Change in course credit type  
- [ ] 7. Change in course attributes (department head signature only)  
- [ ] 8. Change in instructional hours  
- [ ] 9. Change in course description  
- [ ] 10. Change in course requisites  
- [ ] 11. Change in semesters offered (department head signature only)  
- [ ] 12. Transfer from one department to another  

**PROPOSED**:  
- Subject Abbreviation: MSTE  
- Course Number: 49900  
- Long Title: Motorsports Engineering Special Topics  
- Short Title: Motorsports Eng Special Topics  

**EXISTING**:  
- Subject Abbreviation:  
- Course Number:  
- Long Title:  
- Short Title:  

**TERMS OFFERED**:  
- Check All That Apply:  
  - Summer  
  - Fall  
  - Spring  
  - Campus(ES) Involved:  
    - N. Central  
    - Cont Ed  
    - Tech Statewide  
    - Ft. Wayne  
    - W. Lafayette  
    - Indianapolis  

**CREDIT TYPE**:  
1. Field Credit: Cr. Hrs.:  
2. Variable Credit Range:  
   - Minimum Cr. Hrs:  
   - Maximum Cr. Hrs:  
3. Equivalent Credit: Yes [X] No  
4. Thesis Credit: Yes [X] No  

**COURSE ATTRIBUTES**:  
- Pass/No Pass Only  
- Satisfactory/Unsatisfactory Only  
- Repeatable  
- Maximum Repeatable Credit:  
- Credit by Examination  
- Designator Required  
- Special Fees  
- Off Campus Experience  

**INSTRUCTIONAL TYPE**:  
- Lecture  
- Recitation  
- Presentation  
- Laboratory  
- Lab Prep  
- Studio  
- Distance  
- Clinic  
- Experiential  
- Research  
- Ind. Study  
- Pract/Observe  

**MINUTES PER MEETING**:  
**MEETINGS PER WEEK**:  
**WEEKS OFFERED**:  
**% OF CREDIT ALLOCATED**:  
**DELIVERY METHOD (ASYM. OR SYN.)**:  
**DELIVERY MEDIUM (AUDIO, INTERNET, LIVE, TEXT-BASED, VIDEO)**:  

**COURSE DESCRIPTION (INCLUDE REGISTRANTS)**:  
P: Permission of instructor. This is a special topics course for students wishing to pursue advanced studies under the direction of a faculty advisor.

---

**Calumet Department Head** Date  
**Calumet School Dean** Date  
**Fort Wayne Department Head** Date  
**Fort Wayne School Dean** Date  
**Indianapolis Department Head** Date  
**Indianapolis School Dean** Date  
**North Central Department Head** Date  
**North Central Chancellor** Date  
**West Lafayette Department Head** Date  
**West Lafayette College/School Dean** Date  
**West Lafayette Registrar** Date  

**OFFICE OF THE REGISTRAR**
Purdue University
Request for Addition, Expiration, or Revision of an Undergraduate Course
(100-400 Level)

Department: Motorsports Engineering  Effective Session: Spring 2010

Instructions: Please check the items below which describe the purpose of this request:

- New course with supporting documents
- Add existing course offered at another campus
- Expiration of a course
- Change in course number
- Change in course title
- Change in course credit/type
- Change in course attributes (department head signature only)
- Change in instructional hours
- Change in course description
- Change in course requisites
- Change in semesters offered (department head signature only)
- Transfer from one department to another

Proposed:

- Subject Abbreviation: MSME
- Course Number: 49200
- Long Title: Motorsports Engineering Special Topics
- Abbreviated title will be entered by the Office of the Registrar if needed. (20 characters only)

Existing:

- Subject Abbreviation:
- Course Number:
- Long Title:
- Abbreviated title will be entered by the Office of the Registrar if needed. (20 characters only)

Terms Offered:

- Check all that apply:
- Summer
- Fall
- Spring
- Campus(s) Involved:
  - N. Central
  - Tech State
  - Ft. Wayne
  - W. Lafayette
  - Indianapolis

Credit Type:

<table>
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<tr>
<th>Type</th>
<th>Minutes Per Mgr</th>
<th>Meetings Per Week</th>
<th>Weeks Offered</th>
<th>% of Credit Allocated</th>
<th>Delivery Method (Asyn., Or Syn.)</th>
<th>Delivery Medium (Audio, Internet, Live, Text-Based, Video)</th>
<th>Cross-Listed Courses</th>
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Course Attributes:

- Check all that apply:
- Pass/Not Pass Only
- Satisfactory/Unsatisfactory Only
- Repeatable
- Maximum Repeatable Credit:
- Credit by Examination
- Designation Required
- Special Fees
- Off-Campus Experience

Institutional Type:

<table>
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<tr>
<th>Type</th>
<th>Minutes Per Mgr</th>
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Course Description (Include Requisites):

P: Permission of instructor. This is a special topics course for students wishing to pursue advanced studies under the direction of a faculty advisor.

Column Department Head: Date  Column School Dean: Date

Fort Wayne Department Head: Date  Fort Wayne School Dean: Date

Indianapolis Department Head: Date  Indianapolis School Dean: Date

North Central Department Head: Date  North Central Chancellor: Date

West Lafayette Department Head: Date  West Lafayette College/School Dean: Date  West Lafayette Registrar: Date

Office of the Registrar