New Course Request

Check Appropriate Boxes: Undergraduate credit ☑
Graduate credit ☐
Professional credit ☐

1. School/Division: School of Engineering and Technology 2. Academic Subject Code: BMET
3. Course Number: 209 (must be cleared with University Enrollment Services) 4. Instructor: Barbara Christie
5. Course Title: BMET Microprocessor Applications

Recommended Abbreviation (Optional): BMET Microprocessor Applications

(Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Fall 2008
7. Credit Hours: Fixed at 2 or Variable from to
8. Is this course to be graded S-F (only)? Yes ☐ No ☑
9. Is variable title approval being requested? Yes ☐ No ☑
10. Course description (not to exceed 50 words) for Bulletin publication: This course will explore fundamental microprocessor theory and applications in health care technology. Hardware and software in specific equipment will be discussed.

11. Lecture Contact Hours: Fixed at 2 or Variable from to
12. Non-Lecture Contact Hours: Fixed at 0 or Variable from to
13. Estimated enrollment: 15 of which 0 percent are expected to be graduate students.
14. Frequency of scheduling: per year Will this course be required for majors? Yes ☑
15. Justification for new course: BMET students need a specialized course related to the discipline
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.

Submitted by: [Signature] Date 12/11/07 Department Chairman/Division Director

[Signature] Date 12/11/67 Dean

[Signature] Date Chancellor/Vice-President

[Signature] Date University Enrollment Services

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 Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White
BMET 209     BMET Microprocessor Applications

Course Description:  (2 credits) This course will explore fundamental microprocessor theory and applications in health care technology. Hardware and software in specific equipment will be discussed.

Prerequisite:         ECET 109

Textbook            Microprocessor Technology by J S Anderson

Goals:             Students will learn the fundamental principles of microprocessors and their application in the technology used in patient care.

Topics:
1. Number Systems
2. CPU and microprocessor system
3. Memory organization
4. Machine code
5. Machine code instructions
6. Organization and use of a stack
7. Input and Output ports
8. Programming and decision making applications
9. Microprocessor use in patient beds
10. Microprocessor use in signal processing – ESU
11. Other microprocessor applications

Evaluation Methods:
Average of Exam 1 and 2: 30%
final exam: 35%
Homework and Quiz grades, averaged together: 10%
Lab: 25%

Prepared by:        Barbara Christie

Revised:            11/27/07
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE
(100-400 LEVEL)

DEPARTMENT: Engineering and Technology
EFFECTIVE SESSION: Fall 2008

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
- Change in course title
- Change in course number
- 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: BMET
Course Number: 209
Long Title: BMET Microprocessor Applications
Short Title: BMET Microprocessor Ap

PROPOSED CAMPUS(S) INVOLVED:
- Calumet
- Cont Ed
- Ft. Wayne
- Indiana
- N. Central
- Tch Statewide
- W. Lafayette

Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

COURSE ATTRIBUTES: Check All That Apply:

- 1. Fixed Credit: Cr. Hrs.
- 2. Variable Credit Range:
- 3. Maximum Cr. Hrs.:
- 4. Equivalent Credit:
- 5. Designator Required
- 6. Special Fees

INSTRUCTIONAL TYPE

- 1. Pass/Not Pass Only
- 2. Satisfactory/Unsatisfactory Only
- 3. Repeatable
- 4. Credit by Examination
- 5. Full-Time Privilege
- 6. Off-Campus Experience

COURSE DESCRIPTION (INCLUDE REQUIREMENTS):

P: ECET 109 This course will explore fundamental microprocessor theory and applications in health care technology. Hardware and software in specific equipment will be discussed.

OFFICE OF THE REGISTRAR

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