

PROPOSAL NUMBER: 99-700

# CURRICULUM PROPOSAL FORM

**\*DEADLINES:**

REGULAR COURSE PROPOSALS: OCTOBER 23, 1998 FOR FALL, 1999 AND FEBRUARY 19, 1999 FOR SPRING, 2000  
 SHORT-TERM COURSE PROPOSALS: DECEMBER 11, 1998 FOR FALL, 1999 AND MARCH 26, 1998 FOR SPRING 2000

**PROPOSAL TITLE:** Change the course name of (0901.281) for Engineering Materials I to Material Science

**SPONSOR/S:** T.R. Chandrupatla, C. Stewart Slater, Ralph Alan Dusseau

**DEPARTMENT:** Mechanical Eng, Chemical Eng., Civil Eng

**CHECK ALL THAT APPLY:**

UNDERGRADUATE       GRADUATE

**COLLEGE:** Engineering  
 If LAS:     History/Humanities  
               Math/Sciences  
               Social/Behavioral Sciences

\* \* \* \* \*

**TYPE OF PROPOSAL (Check ALL that Apply)**

- |  |  |
|--|--|
| <input type="checkbox"/> General Education<br><input type="checkbox"/> New Course in <u>                    </u> Bank<br><input type="checkbox"/> Existing course, Add To <u>                    </u> Bank<br><input type="checkbox"/> Multicultural/Global Designation<br><input type="checkbox"/> Writing Intensive Designation<br><br><input type="checkbox"/> New Minor/Concentration/Specialization<br><input type="checkbox"/> New Major/Degree Program<br><input type="checkbox"/> Short Term Course Proposal | <input type="checkbox"/> New Course (NOT Gen. Ed.)<br><input type="checkbox"/> Name Change (Dept., School, Major)<br><input type="checkbox"/> Changes in Degree Requirements<br><input type="checkbox"/> Changes Involve Gen. Ed. requirements<br><br><input checked="" type="checkbox"/> Minor Changes to Existing Courses (Name Change)<br><input checked="" type="checkbox"/> Course is NOT General Education<br><input type="checkbox"/> Course IS General Education |
|--|--|

**DEPARTMENT**

(SIGNATURE INDICATES APPROVAL)

[Signature]      11/20/98  
 DEPT. CURRICULUM CHAIR / DATE

TR Chandrupatla      10/20/98  
 DEPT. CHAIRPERSON / DATE

**COLLEGE CURRICULUM COMMITTEE**

DATE OF OPEN HEARING (if necessary) \_\_\_\_\_

APPROVED  
 NOT APPROVED  
 COMMENTS:

R. Hobeth      11/5/98  
 SIGNATURE      DATE

**ACADEMIC DEAN (& GRADUATE DEAN, for New Graduate Programs Only)**

APPROVED  
 NOT APPROVED  
 COMMENTS:

[Signature]      10/23/98  
 SIGNATURE (Academic Dean)      DATE

\_\_\_\_\_  
 SIGNATURE (Graduate Dean)      DATE

**UNIVERSITY CURRICULUM COMMITTEE**

DATE OF OPEN HEARING (if necessary) 2:00 PM (11/2/98)

APPROVED

NOT APPROVED

COMMENTS:

Robert A. Kubat 11/2/98  
SIGNATURE DATE

**SENATE**

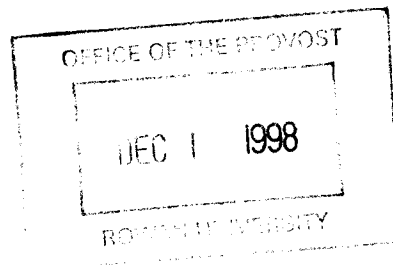
Date announced at Senate 11/2/98

Voted upon at Senate:                       Approved                       Not Approved                      Date:

**EXECUTIVE VICE PRESIDENT/PROVOST**

APPROVED

NOT APPROVED If no, reasons are as follows:



STUDENT CREDIT HOURS \_\_\_\_\_ FACULTY LOAD HOURS \_\_\_\_\_ EQUALIZED CREDIT HOURS \_\_\_\_\_

OFFICIAL COPY & APPROVAL SHEET FILED (DATE): \_\_\_\_\_

DATE/SIGNATURE EXECUTIVE VICE PRESIDENT/PROVOST Robert A. Kubat

**REGISTRAR**

DATE APPROVED COURSE DESCRIPTION RECEIVED \_\_\_\_\_

HEGIS TAXONOMY & COURSE NUMBER ASSIGNED \_\_\_\_\_

DATE/SIGNATURE OF REGISTRAR Robert A. Kubat 12/15/98

**NOTIFICATION FORWARD:**

SENATE CURRICULUM COMMITTEE CHAIRPERSON

DEPARTMENT CHAIRPERSONS

ACADEMIC DEAN(S)

REGISTRAR

SPONSOR(S)

Transmittal of 1/2/99

## *Minor Change*

### **1. Details:**

**a) Change Course Title:** Change the course name of (0901.281) from Engineering Materials I to Material Science. This is to take effect for the class of 2002 and beyond.

**Current**

Engineering Materials I, 2 s.h. (0901.281)

**Current**

Material Science, 2 s.h. (0901.281)

**b) Sponsor:** Dr. Tirupathi R. Chandrupatla, Dr. C. Stewart Slater, Dr. Ralph A. Dusseau and College of Engineering Curriculum Committee

**c) Credit Hours:** 2 semester hours

**d) Course Level:** Sophomore for Mechanical Engineering, and Junior for Civil Engineering, and Chemical Engineering

**e) Curricular Effect:** Required course for chemical, civil and mechanical engineering majors

**f) Prerequisites:** Chemistry I, Physics I

**g) Suggested Time** Fall 1999

**h) Resources:** No additional resources will be needed for this minor change

### **2. Rationale:**

The proposed change is consistent with the on-going assessment and review of the College of Engineering's programs of study. The new title reflects the science content of the course and this is consistent with the ABET guidelines.

### **3. Results of Consultations:**

All three engineering programs where this is a required course are in agreement with the change.

**0901.281**

**2 s.h.**

**Material Science**

*(Prerequisites: 1906.100 and 1902.200)*

This course develops the material structure and property relations. Atomic bonding, lattice structures, crystalline and polymeric structures and properties, imperfections, dislocations, phase diagrams, and quantitative analysis are presented. Properties of metals and alloys, ceramics, polymers, composites and electrical materials are discussed.