



**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

New Course Request

<u>SDSU</u>	<u>Engineering / Construction & Operations Management</u>
Institution	Division/Department
Dennis D. Hedge	3/13/2019
Institutional Approval Signature	Date

Section 1. Course Title and Description

Prefix & No.	Course Title	Credits
GE 385	Introduction to Systems Engineering & Management	3

Course Description

Introduction to the discipline of systems engineering and its intersection with engineering management. Course will cover the process of new systems development comprising concept, design, and build. Risk management, human factors, project management, integration of hardware and software, and system validation.

Pre-requisites or Co-requisites

Prefix & No.	Course Title	Pre-Req/Co-Req?
None		

Registration Restrictions

None

Section 2. Review of Course

2.1. Was the course first offered as an experimental course? Yes No

2.2. Will this be a unique or common course?

Unique Course

Prefix & No.	Course Title	Credits
IENG 366	Engineering Management	3

Provide explanation of differences between proposed course and existing system catalog courses below:

GE 385 will be focused on systems engineering and design. Subject matter on engineering management is a supporting function in the process of systems design.

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?

No. Schedule Management, explain below: The course will be offered once per year and, if demand exceeds resources, a summer section will be added. Schedule management will alternate this course with elective courses taught by College of Engineering faculty.

3.2. Existing program(s) in which course will be offered: Engineering Management Minor

3.3. Proposed instructional method by university: R-Lecture

3.4. Proposed delivery method by university: 001 - Face to Face Term Based Instruction

3.5. Term change will be effective: Fall 2019

3.6. Can students repeat the course for additional credit? Yes, total credit limit: No

3.7. Will grade for this course be limited to S/U (pass/fail)? Yes No

3.8. Will section enrollment be capped? Yes, max per section: No

3.9. Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report? Yes No

3.10. Is this prefix approved for your university? Yes No

Section 4. Department and Course Codes (Completed by University Academic Affairs)

4.1. University Department Code: SCOM

4.2. Proposed CIP Code: 14.0101

Is this a new CIP code for the university? Yes No

**NEW COURSE REQUEST
Supporting Justification for On-Campus Review**

Teresa J.K. Hall	Teresa J.K. Hall	12/10/2018
Request Originator	Signature	Date
Teresa J.K. Hall	Teresa J.K. Hall	12/10/2018
Department Chair	Signature	Date
Bruce W. Berdanier	Bruce W. Berdanier	12/20/2018
School/College Dean	Signature	Date

- Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.
The proposed Engineering Management Minor is designed to provide students with a foundation of knowledge and skills to be a successful technical manager. This course introduces systems engineering, which is related to engineering design processes. Systems engineering is an emerging field that cuts across engineering, applied science, and technology management disciplines.
- Note whether this course is: Required Elective
- In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?
Students in the College of Engineering may want to take this course as an elective.
- If this will be a dual listed course, indicate how the distinction between the two levels will be made.
N/A
- Desired section size 30
- Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
Carrie Steinlicht, Senior Lecturer, PhD
Huitian Lu, Professor, PhD
- Note whether adequate facilities are available and list any special equipment needed for the course.
The Department has smart classroom and a simulation lab that has the software will use.
- Note whether adequate library and media support are available for the course.
Library and media support are adequate and available.
- Will the new course duplicate courses currently being offered on this campus? Yes No
- If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.
N/A