

ROWAN COLLEGE
CURRICULUM COMMITTEE

PROPOSAL TITLE: Masters Thesis Research

 UNDERGRADUATE variable * 1-6 CREDIT HOURS

SPONSOR(S): Ralph Alan Dusseau and School of Engineering Curriculum Committee

DEPARTMENT & TELEPHONE# Civil Engineering Program, School of Engineering

CHECK ONE: COURSE MINOR PROGRAM CONCENTRATION SPECIALIZATION
 ACHIEVEMENT CERTIFICATE CERTIFICATION PROGRAM MAJOR PROGRAM

<p>STEP #1 (DEPARTMENT)</p> <p>APPROVED/DATE: <u>4-24-96</u></p> <p>NOT APPROVED/DATE: _____</p> <p><u>[Signature]</u> DEPT. CURRICULUM CHR.</p> <p>REVIEWED/DATE: <u>4-24-96</u></p> <p><u>[Signature]</u> DEPT. CHR.</p>	<p>STEP #2 (RECEIPT)</p> <p>SCC# <u>96 47-21</u></p> <p>DATE RECEIVED: 1 SENATE JUL 9</p> <p>RECEIVED <u>[Signature]</u> SENATE CURRICULUM CHR.</p>	<p>STEP #3 (SCHOOL)</p> <p>REVIEWED DATE: <u>4-10-96</u></p> <p><input checked="" type="checkbox"/> RECOMMEND TO APPROVE</p> <p><input type="checkbox"/> RECOMMEND NOT TO APPROVE</p> <p>FORWARD FOR OPEN HEARING</p> <p><input checked="" type="checkbox"/> WITHOUT RESERVATIONS</p> <p><input type="checkbox"/> WITH RESERVATIONS</p> <p>COMMENTS:</p> <p><u>[Signature]</u> SCHOOL COMMITTEE CHR.</p>
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<p>STEP #4 (ACADEMIC DEAN)</p> <p><input checked="" type="checkbox"/> RECOMMEND</p> <p><input type="checkbox"/> NOT RECOMMEND</p> <p><input type="checkbox"/> CONDITIONALLY RECOMMEND (SEE COMMENTS)</p> <p>DATE & SIGNATURE, DEAN OF SCHOOL _____</p>	<p>COMMENTS:</p> <p><u>James Tracey 5/14/96</u></p>
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<p>STEP #5 (SENATE CURRICULUM COMMITTEE)</p> <p>DATE OF OPEN HEARING <u>10-28-96</u></p> <p>APPROVED BY SENATE CURRICULUM COMMITTEE (DATE) <u>10/25/96</u></p> <p><input type="checkbox"/> RETURNED TO SPONSOR(S) FOR THE FOLLOWING REASONS:</p> <p>_____</p> <p>_____</p>	<p>* <u>Var. Credit 1-6</u> *</p>
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<p>#6 (SENATE)</p> <p>DATE PRESENTED TO SENATE <u>11-20-96</u></p> <p>NOTIFICATION TO EXECUTIVE VICE PRESIDENT/PROVOST (DATE) _____</p> <p>SENATE CURRICULUM COMMITTEE CHAIR SIGNATURE/DATE <u>[Signature] 11/20/96</u></p>	<p><input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> NOT APPROVED</p>
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STEP #7 (EXECUTIVE VICE PRESIDENT/PROVOST)

DATE RECEIVED _____

APPROVED: YES NO

IF NO, REASONS ARE AS FOLLOWS:

STUDENT CREDIT HOURS _____

FACULTY LOAD HOURS _____

EQUALIZED CREDIT HOURS _____

OFFICIAL COPY & APPROVAL SHEET FILED (DATE) _____

SIGNATURE, EXECUTIVE VICE PRESIDENT/PROVOST *[Signature]*

REGISTRAR

DATE APPROVED COURSE DESCRIPTION RECEIVED 11 Dec 96

HEGIS TAXONOMY AND COURSE NUMBER ASSIGNED 0901.599

DATE/SIGNATURE OF REGISTRAR B. K. Kiley 11 Dec 96

NOTIFICATION FORWARD:

___ SENATE CURRICULUM COMMITTEE CHAIRPERSON

___ DEPARTMENT CHAIRPERSON(S)

___ ACADEMIC DEAN(S)

___ REGISTRAR

___ SPONSOR(S)

Course Proposal:

1. Details:

- a) Course Title: Masters Thesis Research
- b) Sponsor: Ralph Alan Dusseau and the School of Engineering Curriculum Committee
- c) Credit Hours: 1 to 6 credit hours per semester with 6 to 9 credit hours total
- d) Course Level: Graduate (0901.599)
- e) Curricular Effect: Required course for all graduate students in the School of Engineering who choose the masters thesis option.
- f) Prerequisites: Permission of faculty advisor
- g) Suggested Time/
Scale of Implementation: one section per semester beginning in the Spring Semester of 1997
- h) Resources:

Faculty: The course will be administered by existing faculty and by faculty to be hired consistent with the approved School of Engineering development plans and budget.

Library: Library collections will be supplemented as per the School of Engineering development plans and budget. Library acquisitions may also be supplemented by the graduate student's faculty advisor and by other faculty at Rowan College.

Equipment: Laboratory equipment will be provided consistent with the educational and research needs of the School of Engineering as it relates to the specific research project.

Computers: Computer resources will also be provided consistent with the educational and research needs of the School of Engineering as it relates to the specific research project.

2. Rationale:

The proposed course will be a required course for graduate students in the School of Engineering who choose the thesis option for their masters degree program. The course is consistent with the establishment of the School of Engineering as approved by the Board of Trustees in February 1995.

The goal of the thesis option in the Masters Degree Program at Rowan College is to give students a meaningful, leading-edge research experience. To this end, the proposed course (which will be taken in increments of 1 to 6 credits per semester) will provide a 6- to 9-credit research experience that will involve extensive one-on-one research interaction between the graduate student and his or her faculty advisor.

3. Essence of the Course:

a) Objectives:

Upon completion of the course, graduate students in the School of Engineering who choose the masters thesis option will be able to do the following:

Conduct a thorough literature search and review.

Prepare a clear and concise problem statement.

Consult with other faculty and professional experts.

Develop and implement a detailed research plan.

Prepare weekly oral and/or written progress reports.

Derive publishable research results.

Write a quality masters thesis.

Make a final oral presentation and defense.

b) Topical Outline:

The research topic chosen will depend upon the mutual interests of the graduate student and his or her faculty advisor. The course will include the following basic components:

A thorough literature search and review.

A clear and concise problem statement.

A record of consultations with other faculty and professional experts.

A research plan developed and implemented in close collaboration with a faculty mentor.

A record of project development and execution including weekly progress reports.

A set of publishable research results.

A masters thesis.

A final oral presentation and defense.

c) Evaluation and Grading Procedure of Students:

Student grades will be consistent with Rowan College policy regarding masters thesis research and will be based on the quality of the overall research effort, the quality and publishability of the final masters thesis, and the competence of the final oral defense.

d) Course Evaluation:

The proposed course will be evaluated based on student evaluations and curriculum review by engineering faculty.

4. Results of Consultations:

The proposed course will be required for all graduate students in the School of Engineering who choose the thesis option as part of their masters degree program. The course is consistent with the Engineering Curriculum that was approved by the College Senate in December 1994. Consultations were submitted with the original proposal as specified by the Curriculum Committee.

Catalog Description:

Master Thesis Research (0901.599)

This course will provide a meaningful, one-on-one, research experience under the direction of an engineering faculty advisor. The research topic will be chosen by mutual agreement of the student and his or her advisor. The course will include a thorough literature search and review, the development of a clear and concise problem statement, consultations with other faculty and professional experts, and the derivation of publishable results. The research will culminate in a comprehensive masters thesis. A final oral presentation and defense is required.