

Revised 7/23/07

PROPOSAL SUMMARY AND ROUTING FORM

Proposal Title: Minor in Construction

Initiating Unit or Individual: Construction Technology and Management

Contact Person's Name: Ed Brayton e-mail: braytone@ferris.edu phone: 231-591-2370

Date or Term of Proposal Implementation: Fall 2009

- Group I - A – New degree/major or major, redirection of a current offering, or elimination of a degree, major or minor
- Group I - B – New minors or concentrations
- Group II - A – Minor curriculum clean-up and course changes
- Group II - B – New Course
- Group III - Certificates
- Group IV – Off-Campus Programs

Group/Individual	Signature	Date	Vote/Action *
Program Faculty			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Faculty	<i>David Hansen</i>		<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Head / Chair	<i>Edward Brayton</i>	<i>3/25/09</i>	<input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
College Curriculum Committee	<i>Tom McKean</i>	<i>4/1/09</i>	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Dean	<i>James E. [Signature]</i>	<i>4/15/09</i>	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
University Curriculum Committee			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Senate			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Academic Affairs			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support

* Support with Concerns or Not Support must include a list of specific concerns. Votes must be shown for faculty groups. Administrators check appropriate action taken.

To be completed by Academic Affairs

 President (Date Approved)

 Board of Trustees (Date Approved)

 President's Council (Date Approved)

1. Proposal Summary

(Summary is generally less than one page. Briefly: state what is proposed with a summary of rationale and highlights. Additional rationale may be attached.)

To offer a minor (18 credit hours) in construction field administration using current courses. We have had inquiries from business students, HVAC students, Surveying students and Facility Management students. Our Construction Advisory board also recommended that we go with this option because there are many subcontractors that need employees that can schedule the daily and manage the overall field work especially in the mechanical and electrical areas.

The prerequisites for entry into the construction minor are a Microsoft computer course (ISYS 105), an Algebra course (MATH 115) or (MATH 116), a Construction Graphics course (CONM 116) or (ARCH 101) or Proficiency, a Construction Practices course (CONM 111) or (ARCH 115) or Proficiency, an Overall GPA of 2.50 and a minimum of 30 semester credit hours. In addition, Trigonometry (MATH 120) or (MATH 126) is a required prerequisite to most courses.

Students must achieve an average GPA of 2.0 or higher for the courses in this minor to receive the certificate.

2. Summary of All Course Action Required*

- a. **Newly Created Courses to FSU:**
Prefix Number Title
None
- b. **Courses to be Deleted From FSU Catalog:**
Prefix Number Title
None
- c. **Existing Course(s) to be Modified:**
Prefix Number Title
None
- d. **Addition of existing FSU courses to program**
Prefix Number Title
None
- e. **Removal of existing FSU courses from program**
Prefix Number Title
None

Contact Senate Secretary or UCC Chair if spaces for additional courses are needed.

Minor in Construction Outcome Statements and Assessment Plans

MINOR IN CONSTRUCTION END-OF-MINOR OUTCOMES

Upon completion of the Minor in Construction, each student will be able to:

1. Develop a project estimate, draw a logic diagram, and produce a project schedule.
2. Possess the necessary skills to function as a member of the project management team and be able to perform all of the tasks required in the field to implement, analyze, monitor and solve problems during construction.

MINOR IN CONSTRUCTION ASSESSMENT PLAN

1. Evaluate the general performance of students on their ability to compile project estimates, logic diagrams, and project schedules and to function as a member of the field project team through the normal completion of course work within the minor.
2. Periodically collect information using an indirect survey method at the end of the minor of certain courses to ascertain success or identify potential modifications to the minor .

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.
2. The department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal.

Failure to respond is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the department. This response will be in writing and be included in the proposal following the consultation form.

RE: Proposal Title Minor in Construction

Initiator(s): Ed Brayton

Proposal Contact: Ed Brayton Date Sent: 2/19/09

Department: Construction Technology and Management Campus Address: GRN 227
(Please print)

Responding Department: Accountancy, Finance & ISYS

Chair/Head/Coordinator: Jim Woolen Date Returned: _____

Based upon department faculty review on _____ (date), we

- Support the above proposal.
- Support the above proposal with the modifications and concerns listed below.
- Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

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Initiator(s): Ed Brayton

Proposal Contact: Ed Brayton Date Sent: 2/18/09

Department: Construction Technology and Management Campus Address: GRN 227
(Please print)

Responding Department: Architectural Technology and Facility Management

Chair/Head/Coordinator: _____ Date Returned: 3/25/09 DANIEL NABELEKIRE

Based upon department faculty review on 3/23/09 (date), we

- Support the above proposal.
- Support the above proposal with the modifications and concerns listed below.
- Do not support the proposal for the reasons listed below.

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<p>Initiator(s): <u>Ed Brayton</u></p> <p>Proposal Contact: Ed Brayton Date Sent: 2/18/09</p> <p>Department: <u>Construction Technology and Management</u> Campus Address: <u>GRN 227</u> (Please print)</p>

<p>Responding Department: HVACR Department</p> <p>Chair/Head/Coordinator: _____ Date Returned: <u>3-26-09</u> <i>Mike Jantz</i></p>
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Based upon department faculty review on 3-26-09 (date), we

- Support the above proposal.
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<p>Initiator(s): <u>Ed Brayton</u></p> <p>Proposal Contact: Ed Brayton Date Sent: 2/18/09</p> <p>Department: <u>Construction Technology and Management</u> Campus Address: <u>GRN 227</u> (Please print)</p>
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<p>Responding Department: <u>Graduate Programs</u></p> <p>Chair/Head/Coordinator: _____ Date Returned: _____</p> <p><i>[Signature]</i> 2-20-09</p>
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Based upon department faculty review on _____ (date), we

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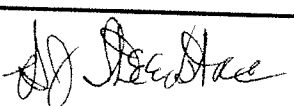
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Initiator(s): Ed Brayton _____
Proposal Contact: <u>Ed Brayton</u> Date Sent: <u>2/18/09</u>
Department: Construction Technology and Management Campus Address: <u>GRN 227</u> (Please print)

Responding Department: <u>Management Department</u>	
Chair/Head/Coordinator: _____ Date Returned: _____	<u>2-20-09</u>

Based upon department faculty review on _____ (date), we

- Support the above proposal.
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Comment regarding the impact this proposal has on scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

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RE: Proposal Title Minor in Construction

Initiator(s): Ed Brayton

Proposal Contact: Ed Brayton **Date Sent:** 2/18/09

Department: Construction Technology and Management **Campus Address:** GRN 227
(Please print)

Responding Department: Marketing Department

Chair/Head/Coordinator: _____ Date Returned: _____

Based upon department faculty review on _____ (date), we

- Support the above proposal.
- Support the above proposal with the modifications and concerns listed below.
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Comment regarding the impact this proposal has on scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

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<p>Initiator(s): <u>Ed Brayton</u></p> <p>Proposal Contact: Ed Brayton Date Sent: 2/18/09</p> <p>Department: <u>Construction Technology and Management</u> Campus Address: <u>GRN 227</u> (Please print)</p>

<p>Responding Department: <u>Surveying Engineering</u> Technology</p> <p>Chair/Head/Coordinator: <u>JH</u> Date Returned: <u>2/26/09</u></p>
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Based upon department faculty review on 2/26/09 (date), we

- Support the above proposal.
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Allow SURE 110 4(2+6) as a substitute
for CONM 122
This will allow some surveying students
to pursue the minor.

FORM D PROPOSED SUMMARY- MINOR IN CONSTRUCTION

The prerequisites for entry into the construction minor are a Microsoft computer course (ISYS 105, an Algebra course (MATH 115) or (MATH 116), a Construction Graphics course (CONM 116) or (ARCH 101) or Proficiency, a Construction Practices course (CONM 111) or (ARCH 115) or Proficiency, an Overall GPA of 2.50 and a minimum of 30 semester credit hours. In addition, Trigonometry (MATH 120) or (MATH 126) is a required prerequisite to most courses. The core course work for the minor in construction will consist of the following:

Core Courses	Credits
CONM 112 Construction Plans and Specifications (CONM 116, Math 115/116)	3
CONM 211 Construction Quantity Estimating (CONM 112, MATH 120/126)	3
CONM 222 Construction Administration (CONM 112, CONM 211, MATH 120/126)	3
CONM 312 Construction Scheduling (CONM 222, MATH 120/126, GPA 2.5 or +)	3
CORE CREDITS	12
Select Two (2) elective pairs from the list below:	OPTION CREDITS 6
You must meet the prerequisites to take the courses.	TOTAL CREDITS 18
Option 1 Courses	Credits
CONM 122 Construction Surveying (MATH 120/126)	3
BCTM 225 Field Engineering (CONM 122, MATH 120, ISYS 105)	3
Option 2 Courses	Credits
CONM 122 Construction Surveying or SURE 110 (MATH 120/126)	3
CETM 226 Highway Technology (CONM 122, MATH 120/126, ISYS 105)	3
Option 3 Courses	Credits
BCTM 223 Mechanical and Electrical Plan Reading (CONM 112)	3
HVAC 337 Mechanical and Electrical Systems for Buildings	3
Option 4 Courses	Credits
CONM 121 Materials and Testing (ACT MATH 19 or above)	3
CETM 214 Advanced Materials (CONM 121, MATH 120/126)	3
Option 5 Courses	Credits
Entry Requirements to 300 and 400 Level courses are passed MATH 120/126 with C- or better and a GPA of 2.5 or above and the necessary prerequisites.	
CONM 321 Construction Cost Estimating (CONM 211, MATH 120/126, GPA 2.5+)	3
CONM 413 Construction Economics (By Permission, MATH 120/126, GPA 2.5+)	3
Option 6 Courses	Credits
SURE 110 Fundamentals of Surveying (MATH 120)	4
CENG 220 Engineering Surveying (SURE 110)	4

Proposal for Minor in Construction

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Core/ Option	ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
Prereq	ISYS	105	Intro to Micro Systems& Software		3
Prereq	MATH	115	College Algebra (Placement)	C- or better in MATH 110 or ACT Placement of 19 or +	3
Prereq	CONM	116	Construction Graphics or Proficiency	C- or better in MATH 110 or ACT Placement of 19 or + or ARCH 101	2
Prereq	CONM	111	Construction Practices	CONM 116 or ARCH 115, MATH 115 or MATH 116	3

First Semester

Core/ Option	ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
Core	CONM	112	Plans and Specifications	CONM 116, MATH 115/116	3
Prereq	MATH	120	Trigonometry	MATH 115 or MATH 116	3
Option 3	HVAC	337	Mechanical & Electrical Systems		3
Option 4	CONM	121	Materials, Properties/Testing	C- or better in MATH 110 or ACT Placement of 19 or better	3

FORM D PROPOSED CHECKSHEET

Proposal for Minor in Construction

Second Semester

Core/ Option	ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
Core	CONM	211	Construction Estimating	CONM 111, 112, MATH 120 or MATH 126	3
Op 1, 2	CONM	122	Const Surveying	MATH 120 or MATH 126	3
Option 3	BCTM	223	Mechanical/Electrical Plans	CONM 112	3
Option 4	CETM	214	Advanced Materials	CONM 121, MATH 120/126	3
Option 6	SURE	110	Fundamentals of Surveying	MATH 120	4

Third Semester

Core/ Option	ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
Core	CONM	222	Construction Administration	CONM 111, 112, CONM 211, MATH 120/126	3
Option 1	BCTM	225	Field Engineering w/ CAD	CONM 122 or SURE 110, MATH 120/126, ISYS 105	3
Option 2	CETM	226	Highway Technology	CONM 122 or SURE 110, MATH 120/126, ISYS 105	3
Option 6	CENG	220	Engineering Surveying	SURE 110	4

Fourth Semester

Core/ Option	ABBR	NO.	COURSE DESCRIPTION	PREREQUISITES	CREDITS
Core	CONM	312	Construction Scheduling	CONM 222, MATH 120/126, GPA 2.5 or +	3
Option 5	CONM	321	Construction Cost Estimating	CONM 211, MATH 120/126, GPA 2.5 or +	3
Option 5	CONM	413	Construction Economics	By Permission only, MATH 120/126, GPA 2.5 +	3