

SRU205 RECORD ADDED

C U R R I C U L U M U P D A T E

0-A A 210 SEARCH QTR:AUT/2012

12/05/12 11:25

ACTION:F (A=ADD C=CHG D=DEL F=FIND N=NXT P=PRIOR 2=PAGE2) LAST UPDATE:12/05/12

EFFECTIVE QTR/YEAR: WIN/2013-AUT/9999 BRANCH:0 Seattle

SHRT TITLE:ENGR STATICS

COLLEGE:J ENGR

LONG TITLE:ENGINEERING STATICS

ADDED:03/15/1999 CHANGED:12/05/2012 APPR DL:___/___/___ DROPPED:___/___/___

QTR CREDITS: 4.0 - ___ CRDT CONTROL:1 MAX REPEAT CREDITS:___ EXEMPT:___
GRADE SYSTEM:___ GENERAL EDUCATION: RSPNSBL COURSE:___
HONORS:___ VLPA :___ JOINT COURSES:___
DEDUCTIBLE:___ INDIV&SOC :___
SUMMER ONLY:___ NAT. WORLD:Y
OMIT FROM TS:___ FROM CAT:___ ELECTIVE :___
INDEPN DNT STDY:___ QUANT/S.R.:___
DUPL ENROLL:___ ENGL. COMP:___
FEE USE CD:___ WRITING :___ RPT REG: 1:Y 2:Y 3:Y
FEE INFO: TYPE:___ \$___ HYPHENATED CODE:___
BUDGET:___ RV OBJ CD:___ COURSE IS LAST OF HYPHENATED:___
COURSE PRIO LIST:___ PRIOR HYPHENATED
COMMENT:EMAIL PREQ CHG PREREQ:Y COURSE:___

SRU205B ADD PRE-REQ DATA, PRESS ENTER

C U R R I C U L U M P R E R E Q U I S I T E S PAGE 2

O-A A 210 SEARCH QTR:AUT/9999

LAST UPDATE: 12/05/12

ACTION:C (A=ADD C=CHG F=FND N=NXT P=PRIO R=RES 1=MAIN B=BLNK)

EFFECTIVE QTR/YEAR: WIN/2013-AUT/9999

COURSE: ENGR STATICS

LANGUAGE OF ADMISSION:00

CLASS>4:N

CANCEL REG IF PREREQ NOT MET:Y

TEST: _____ SCORE>= 000 <= 000 A/O: _ TEST: _____ SCORE>= 000 <= 000 A/O: _

TEST: _____ SCORE>= 000 <= 000 A/O: _ TEST: _____ SCORE>= 000 <= 000 A/O: _

A SEQ COURSE ### GP + X GRD CR CC

-- 100 MATH 126 01 O -- 2.0 Y N

-- 120 MATH 136 01 A -- 2.0 Y N

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

A SEQ COURSE ### GP + X GRD CR CC

-- 110 MATH 129 01 O -- 2.0 Y N

-- 130 PHYS 121 02 -- 2.0 Y N

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

-- -----

University Curriculum Office (UWCR)

From: UWCR <uwcr@u.washington.edu>
Sent: Wednesday, December 05, 2012 11:11 AM
To: uwcr@u.washington.edu
Subject: A prerequisite change request has arrived

Timestamp: 2012-12-05 11:11:28 PST
Name: Marlo Anderson
Email: marlo@aa.washington.edu
Course: A A 210

Current Pre-req: MATH 126 or Math 136; PHYS 121.

New Pre-req: either 2.0 in MATH 126 or 2.0 in MATH 136 and 2.0 in PHYS 121.

Cancellation: Yes
Restrict repeats?: Yes
Minimum Grade: 2.0
Quarter: WIN/2013

Reason: We were under the impression that this was already in place. The course is overloaded and we need to ensure that qualified students are able to get into this course.

Comments: The course has been overloaded during the past two academic years. This is also the first course for pre-engineering students and we need to ensure that students are success adequately prepared to allow them to continue with the remaining engineering fundamentals.

COURSE CHANGE APPLICATION

University of Washington Curriculum Review Committee

APPROVED
JUN 4 6 2009
CURRICULUM REVIEW

For Office Use Only:

Prefix (new if changing,
6 characters max.)

A A

Number
(new if changing)

210

Offered jointly with:

College or School Engineering	Department Aeronautics and Astronautics	Date May 20, 2009
Course Title (list existing title or new title if changing) Engineering Statics		Credits (list existing credits or new credits if changing) 4

1. PURPOSE OF REQUEST (Check all that apply)

- ☒ Permanent change, to be effective Autumn Quarter 20 09.
- ☐ Temporary change, to be effective _____ Quarter 20 _____ through _____ Quarter 20 _____.

	OLD (CURRENT) DATA	NEW DATA
<input type="checkbox"/> Change prefix and/or number		
<input type="checkbox"/> Change course title *		
<input type="checkbox"/> Change abbreviated title (19 spaces max.) *(Must be changed if changing course title, type in CAPS)		
<input type="checkbox"/> Change credits		
<input type="checkbox"/> Change prerequisites <input checked="" type="checkbox"/> Enforce prerequisite cancellation		

- ☐ Add joint status
- ☒ Change course description
- ☐ Change to permanent CR/NC only
- ☐ Change contact hours
- ☐ Drop course
- ☐ Drop joint status
- ☐ Change Areas of Knowledge (only if changing course content)
- ☐ Drop permanent CR/NC only
- ☐ Allow course to be offered with DL status (DL addendum attached)

Attach a course syllabus/outline and reading list if requesting an increase in course level or credits or a substantial change in content.

2. JUSTIFICATION and CONTACT INFORMATION

Explain why this change is being proposed, including its relationship to your overall curriculum and what comes before and after the course. Please list contact information for individual(s) submitting this application. (Attach additional sheet if necessary.)

This course change application is being requested by the College of Engineering in order for us to define the total number of contact hours per quarter required in this course. There is no documentation that defines how the contact hours have been allocated. (see attached)

The number of contact hours for the course will be 3 one hour lecture sessions and a 1 one hour quiz session per week. In addition, this course will no longer be offered in spring quarter. The autumn and winter class size has been increased to compensate.

Contact Name: Adam Bruckner	Phone: 206-543-6143	Email: Bruckner@aa.washington.edu	Box #: 352400
-----------------------------	---------------------	-----------------------------------	---------------

3. CATALOG DATA/COURSE DESCRIPTION (Complete only if changed. **Must** be double spaced.)

Check all applicable Areas of Knowledge categories ☐ VLPA ☐ I&S ☒ NW ☐ QSR ☐ C

(50-word limit)

Vector analysis applied to equilibrium of rigid body systems and subsystems. Force and moment resultants, free body diagrams, internal forces, and friction. Analysis of basic structural and machine systems and components. Prerequisites: either MATH 126, MATH 129, or MATH 136; PHYS 121.

Optional Catalog information (include only if you want this information listed in the General Catalog description):

Names and ranks of probable instructors (Include curriculum vitae for any instructor not now on the University faculty)

Quarter(s) offered (A, W, Sp, S) A,W,S

4. CREDITS AND HOURS (Complete only if changed)

a. Contact and outside hours: 1 credit represents a total time commitment of 3 hours per week of student effort.

Contact hours per week		
Lecture <u>3</u>	Laboratory <u> </u>	
Quiz section <u>1</u>	Studio <u> </u>	
Seminar <u> </u>	Other* <u> </u>	
*Attach explanation and justification for "other" contact hours.		TOTAL WEEKLY CONTACT HOURS: 4
How many additional hours will a student be expected to spend each week in preparation for this course?		TOTAL WEEKLY OUTSIDE HOURS: 8
		TOTAL WEEKLY CONTACT AND OUTSIDE HOURS: 12

b. If variable credit, how will the number of credits awarded be related to the amount of student effort required?

c. How will students be evaluated for credit or grades? Provide specific information on assignments, projects, exams, etc. and relative % for each area.

Homework 25%
Mid-Term 35%
Final 40%

5. STUDENTS (Complete only if changed)

a. Anticipated enrollment per quarter: 195.

b. Types of students expected (undergraduate majors, undergraduate non-majors, graduate or professional students):
Undergraduate pre-engineering majors

6. LEARNING OBJECTIVES (Complete only if changing credits or course description)

What are the primary learning objectives for the course?

Only change is eliminating the wording, "recommended graphics background" in course description otherwise no change.

7. JOINT COURSE

List all departments, schools, or colleges participating. Joint course applications require a signature from each unit.
(If units from more than one school or college participate, a separate application must be filed by each.)

Name of unit (List the unit responsible for administering the course first)	Course prefix and number	Add joint status	Drop joint status	Signature of chair/director

8. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED

If this course includes subject matter currently dealt with by any other University units, the originating department must circulate this application for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this application.

Name of unit	Signature of dean/chair/director	Recommend approval	Recommend disapproval (attach explanation)	Date

9. APPROVAL

Chair/Director of submitting department/unit

College Curriculum Committee

College Dean/Vice Chancellor

Date

5/22/09

6-2-09

6-3-09

THE DEPARTMENT OF AERONAUTICS AND ASTRONAUTICS

AA 210 STATICS

AUTUMN, WINTER AND SUMMER QUARTERS

CATALOG DATA: ENGINEERING STATICS, 4 credits
Vector analysis applies to equilibrium of rigid body systems and subsystems.
Force and moment resultants, free body diagrams, internal forces, and friction.
Analysis of basic structural and machine systems and components. Prerequisites:
either MATH 126, MATH 129, or MATH 136, PHYS 121.

PREREQUISITES BY TOPIC: Calculus and Physics

TEXTBOOK: Bedford, Anthony M. and Fowler, Wallace, Engineering Mechanics Statics and Dynamics, 4th Edition

REFERENCES: None

OBJECTIVES:

- 1) To reinforce concepts of vectors and vector operations as they apply to statics.
- 2) To give students experience in applying the basic principles of force and moment equilibrium to a broad spectrum of engineering problems.
- 3) To introduce students to an organized approach to problem formulation and solution in engineering.

OUTCOMES:

- 1) Students will understand basic concepts of vectors and vector operations and be able to apply these tools to the analysis of forces and torques acting on a body.
- 2) Students will be able to formulate and solve a system of equations for the forces and torques necessary to maintain equilibrium of various 2D and 3D systems by applying Newton's First and Third Laws.
- 3) Students will gain experience with the concept of the centroid and moments of inertia.
- 4) Students will develop Confidence in analyzing the internal forces and moments acting throughout a given structure.
- 5) Students will be able to analyze the behavior of simple systems involving static and kinetic friction.

TOPICS:

- 1) Overview of statics. Vectors: addition, components, dot product
- 2) Type of forces; equilibrium; free-body diagrams.
- 3) Forces and moments; moment as cross-product; couples; equivalent systems of forces.
- 4) Equilibrium of supported bodies; types of supports; 2-D and 3-D applications.
- 5) Analysis of common structures - trusses and frames.
- 6) Centers of mass; distributed forces.
- 7) Moments of inertia; applications of theorems for computation.
- 8) Internal forces; shear and bending moments.

CLASS SCHEDULE: Three 50 minute lectures per week and one 50 minute quiz section.

THE DEPARTMENT OF AERONAUTICS AND ASTRONAUTICS

LABORATORY PROJECTS: None

COMPUTER USAGE: None

PROFESSIONAL COMPONENT:

RELATIONSHIP TO PROGRAM OUTCOMES:

- A) Graduates will demonstrate a solid mastery of fundamentals in *aerospace* engineering disciplines: structures.
- B) Graduates will have a combination of analytical, computational, and experimental skills.

RELATIONSHIP TO ABET OUTCOMES:

- a) An ability to apply knowledge of mathematics, science, and engineering.
- e) An ability to identify, formulate and solve engineering problems.
- k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

COORDINATOR: Keith Holsapple, Professor of Aeronautics and Astronautics

PREPARED BY: Undergraduate Committee, 4/2000, Carl Knowlen, Research Scientist 1/2007
Adam Bruckner, 5/22/2009

ASSESSMENT:

1) Homework	25%
2) Mid-Term	35%
3) Final Exam	40%

* Subject to change.

UNIVERSITY OF WASHINGTON CURRICULUM BOARD
COURSE CHANGE APPLICATION

3/11/71

ENGR 180

New course prefix and number

Department, School, or College Engineering

APPROVED

Date submitted 2/16/71

RESTRICTIONS:

Courses changed with this form do not become new courses, and students taking the original and the changed courses will not receive credit for both. If it is desired that students receive credit for both the original course and the changed course, the original should be dropped with this form and the new course applied for on the NEW COURSE APPLICATION form, or a maximum number of credits for this course should be specified below.

APPLICATION FOR:

(Check as many boxes as are appropriate.)

☒ Permanent change ☐ Temporary change for _____ Quarter 19 _____

☒ Change of title a. Old title Statics

List new title in 2. a.

~~Vectors, Statics~~

Engr. Statics

b. New abbreviated title for transcripts _____

Not to exceed 19 characters, including spaces

☐ Increasing course number to higher level. Old prefix and number _____

☒ Other change of number. Old prefix and number GE 112

☐ Increasing credits by more than 1 credit. Old credits _____

☒ Other change of credit. Old credits 3

List new prefix, number, and/or credits in 2. b.

☐ Course to be dropped.

☒ Other (specify) _____

Course description change

Detail on other side of this form

1. JUSTIFICATION FOR THIS ACTION: Change prefix and number to fit new College curriculum in the technical breadth area. Addition of vectors and more detailed course description.

2. CATALOG DATA:

a. Course title ~~Vectors, Statics~~ Engineering Statics

b. Course prefix and number ENGR 180 Credits 4

e.g., CMU 200

c. In undergraduate courses it is customary to allow a maximum of 1 credit for each hour of lecture or quiz session a week and 1 credit for each two hours of laboratory work a week. Departures from this procedure must be justified.

3. IS THIS A JOINT COURSE?

☒ No

☐ Yes a. Other Department, School, or College _____

b. Course prefix and number in that unit _____

c. Signature of Chairman of that unit _____

4. SCHEDULING:

(An approved change will not appear in the Time Schedule until appropriate Time Schedule forms are completed by the offering unit.)

a. Name of faculty member in charge of course Alexander Rank Assoc. Prof.

b. Change is to take effect Autumn Quarter 19 71

5. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED:

(If this course covers areas also covered by other units in the University, it is essential that this application be reviewed by those units and that agreement to the course change by those units indicated by signatures below.)

Name of unit(s) _____ Signature of Dean or Chairman _____ Comments _____ Date _____

6. APPROVAL:

Chairman T. J. Macartney

College Curriculum Committee _____

Dean _____

University Curriculum Board _____

Date

3/19/71

MAR 9 1971

MAR 8 1971

ENGR 180 ~~VECTORS & STATICS~~ (4)

Engineering Statics

Principles of statics, basic concepts, parallelogram law, Newton's law, resultants, force-couple relationships, equilibrium diagrams, equilibrium analysis, three-dimensional structures, two-dimensional frames, trusses, friction, and virtual work. Vector algebra used throughout the course.

**UNIVERSITY OF WASHINGTON CURRICULUM BOARD
COURSE CHANGE APPLICATION**

Prefix	Number
E N G R	210
Joint Course Prefix and Number	

APPROVED

MAR 23 78

College or School Engineering Department Engineering Date 2/10/78

Applications for major change in course content should be submitted on a NEW COURSE APPLICATION form.

- ☒ Permanent change, to be effective Fall Quarter 19 78
☐ Temporary change, to be effective _____ Quarter 19 _____ through _____ Quarter 19 _____

1. JUSTIFICATION FOR THIS ACTION AND ANTICIPATED IMPACT (continue on separate sheet if necessary):

1. Add pre-requisites of Math 126, Physics 121,
2. Change from freshman 100 level to sophomore 200 level
3. See attachment

If an increase in credit or course level is requested, attach a justification and description of additions or changes in content

2. CATALOG DATA:

	OLD (complete all items)	NEW (complete only changed items)
Prefix and number*	ENGR 180	ENGR 210
Title	Engineering Statics	
Abbreviated title (19 spaces)	Engr Statics	
Credits	4	

- ☒ New prerequisites
☒ New course description
 (See reverse side)

- ☐ Change to permanent CR/NC only
☐ Drop permanent CR/NC only
☐ May be repeated for credit

* New number at top of page

☐ Drop course

It is customary to allow a maximum of 1 credit for each 3 hours of total student effort required each week. If the credit assigned does not follow this rule, please attach a statement of justification.

3. JOINT COURSE (if this is a joint course complete this section):

- a. University unit responsible for administration of the course _____
- b. Course prefix and number in other unit(s) _____
- c. Signature of Chairman of that unit(s) _____

☐ Change to joint status ☐ Drop joint status ☐ Joint status remains the same

4. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED:

If this course includes subject matter currently dealt with by other University units, the originating department should circulate this application for review by those units. If this is not done, the college curriculum committee or the University Curriculum Board will do so, which may delay action on this application.

Name of unit	Signature of Dean or Chairman	Recommend approval	Recommend disapproval*	Date
_____	_____			_____
_____	_____			_____

* Please attach explanations

5. APPROVAL:

Chairman T. W. McCartney Date 2/13/78
 College Curriculum Committee K. J. Gould 3/14/78
 College Dean K. J. Gould 3/14/78
 Graduate School Dean _____
 University Curriculum Board _____

COMPLETE OTHER SIDE OF THIS FORM IF COURSE DESCRIPTION IS CHANGED

COMPLETE THIS SECTION ONLY IF COURSE DESCRIPTION IS CHANGED

CATALOG DATA:

Course prefix	ENGR	Course title	
and No.	189 210		Engineering Statics
Credits	4	Quarter(s) offered (A, W, Sp, and/or S)	AWSpS
<input type="checkbox"/> Permanent CR/NC only		<input type="checkbox"/>	
Last name(s) of instructor(s):			
Alexander			
New General Catalog description (please double space):		* Check here if to be included in General Catalog <input checked="" type="checkbox"/>	
Principles of statics, basic concepts, parallelogram law, Newton's law ^s , resultants, force-couple relationships, equilibrium diagrams, equilibrium analysis, three-dimensional structures, two-dimensional frames, trusses, beams, and friction. Vector algebra used throughout the course. Graphics background recommended.			
Prerequisites: <u>Math 126</u> , <u>Phys 121</u> ; graphics recommended. <i>background</i>			
Desirable preparation or prerequisites to be included in General Catalog description (normally required for 300- or 400-level courses):			
<u>121</u> Math 126 Phys 121 Graphics recommended			

Abbreviated title for transcripts (not to exceed 19 characters, including spaces)

Former General Catalog description:

**UNIVERSITY OF WASHINGTON CURRICULUM BOARD
COURSE CHANGE APPLICATION**

Prefix	Number
E N G R	180 210
Joint Course Prefix and Number	

College or School ENGR Department ENGR Date 6/15/78

Applications for major change in course content should be submitted on a NEW COURSE APPLICATION form.

- ☐ Permanent change, to be effective _____ Quarter 19_____
☒ Temporary change, to be effective Fall _____ Quarter 1978 through _____ Quarter 19_____
3/78

1. JUSTIFICATION FOR THIS ACTION AND ANTICIPATED IMPACT (continue on separate sheet if necessary): Recently, Spr. 1978, the course number was changed to 210. This request is to delay the change from Fall 1978 to Wtr 1979. The timing on the change was such that students preregistering for Fall have signed for 180.

If an increase in credit or course level is requested, attach a justification and description of additions or changes in content

2. CATALOG DATA:

	OLD (complete all items)	NEW (complete only changed items)
Prefix and number*	Engr 210	180
Title	chg 210 repl 180 eff. date from (eff. A 78) to (eff. W 79)	
Abbreviated title (19 spaces)	(ch in course descr + preg.)	
Credits		

- ☐ New prerequisites ☐ Change to permanent CR/NC only * New number at top of page
☐ New course description ☐ Drop permanent CR/NC only
(See reverse side) ☐ May be repeated for credit ☐ Drop course

If it is customary to allow a maximum of 1 credit for each 3 hours of total student effort required each week. If the credit assigned does not follow this rule, please attach a statement of justification.

3. JOINT COURSE (if this is a joint course complete this section):

- a. University unit responsible for administration of the course _____
b. Course prefix and number in other unit(s) _____
c. Signature of Chairman of that unit(s) _____

- ☐ Change to joint status ☐ Drop joint status ☐ Joint status remains the same

4. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED:

If this course includes subject matter currently dealt with by other University units, the originating department should circulate this application for review by those units. If this is not done, the college curriculum committee or the University Curriculum Board will do so, which may delay action on this application.

Name of unit	Signature of Dean or Chairman	Recommend approval	Recommend disapproval*	Date

* Please attach explanations

5. APPROVAL:

Chairman T. W. H. H. H. H. H. Date 6/16/78
College Curriculum Committee K. J. Gault 6/21/78
College Dean K. J. Gault 6/21/78
Graduate School Dean _____
University Curriculum Board _____

COMPLETE OTHER SIDE OF THIS FORM IF COURSE DESCRIPTION IS CHANGED

COMPLETE THIS SECTION ONLY IF COURSE DESCRIPTION IS CHANGED

CATALOG DATA:

Course prefix _____ and No. _____	Course title _____
Credits _____	Quarter(s) offered (A, W, Sp, and/or S) _____ <input type="checkbox"/>
<input type="checkbox"/> Permanent CR/NC only	
Last name(s) of instructor(s): _____ <input type="checkbox"/>	
New General Catalog description (<i>please double space</i>): _____ * Check here if to be included in General Catalog	
Desirable preparation or prerequisites to be included in General Catalog description (normally required for 300- or 400-level courses):	

Abbreviated title for transcripts (not to exceed 19 characters, including spaces)

Former General Catalog description:

University of Washington
Curriculum Review Committee
COURSE CHANGE APPLICATION

Approved
1/24/96

Prefix (5 characters max.)

ENGR

New number

210

Offered jointly with:

Prefix (5 characters max.)

New number

College or School College of Engineering	Department	Subdepartment	Date 11-29-95
Course Title Engineering Statics			Credits 4

1. PURPOSE OF REQUEST (Check all that apply)

☒ Permanent change, to be effective Winter Quarter 19 96

☐ Temporary change, to be effective Quarter 19 through Quarter 19

	CURRENT DATA	NEW DATA
<input type="checkbox"/> Change prefix and/or number		
<input type="checkbox"/> Change course title		
<input type="checkbox"/> Change abbreviated title (19 spaces max.)		
<input type="checkbox"/> Change credits		
<input type="checkbox"/> Change prerequisites		

☐ Change joint status

☐ Change contact hours

☐ Change to permanent CR/NC only

☐ Drop course

☒ Change catalog data

☐ Change resource requirements

☐ Drop permanent CR/NC only

Attach a course outline and reading list if requesting an increase in course level or credits, or a substantial change in content.

2. JUSTIFICATION

Explain why this change is being proposed, including the relationship of this course to your overall curriculum.

(Attach additional sheet if necessary.)

Revised description more accurately describes the course content.

3. CATALOG DATA (Complete only if changed)

New catalog description (please double space)

(50-word limit, including prerequisites and "Offered jointly with XXX 100" if applicable)

Vector analysis applied to equilibrium of rigid body systems and subsystems, Force and moment resultants, free body diagrams, internal forces, and friction. Analysis of basic structural and machine systems and components. Prerequisites: MATH 126, PHYS 121, recommended: graphics background. Offered: AWSpS.

and

Catalog subheading (if any) for this course within your department

Names and ranks of probable instructors (Include curriculum vitae for any instructor not now on the University faculty)

Quarter(s) offered (A, W, Sp, S) AWSpS

☐ Include in General Catalog

☐ Include in General Catalog

4. CREDITS AND HOURS (Complete only if changed)

a. Contact and outside hours: 1 credit represents a total time commitment of 3 hours per week of student effort.

Contact hours per week		
Lecture _____	Laboratory _____	
Quiz section _____	Studio _____	
Seminar _____	Other* _____	
*Attach explanation and justification for "other" contact hours.		TOTAL CONTACT HOURS:
How many additional hours will a student be expected to spend each week in preparation for this course?		OUTSIDE HOURS:
		TOTAL WEEKLY CONTACT AND OUTSIDE HOURS:

b. If variable credit, how will the number of credits awarded be related to the amount of student effort required?

c. How will students be evaluated for credit or grades?

5. STUDENTS (Complete only if changed)

a. Anticipated enrollment per quarter: _____

b. Types of students expected (undergraduate majors, undergraduate non-majors, graduate or professional students):

6. RESOURCES (Complete only if changed)

Will additional resources will be required to teach this course, including new space, equipment, computer, library, or other instructional resources? Please explain.

7. JOINT COURSE

List all departments, schools, or colleges participating. Joint course applications require a signature from each unit. (If units from more than one school or college participate, a separate application must be filed by each.)

Name of unit (List the unit responsible for administering the course first)	Course prefix and number	Add joint status	Drop joint status	Signature of chair

8. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED

If this course includes subject matter currently dealt with by any other University units, the originating department must circulate this application for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this application.

Name of unit	Signature of dean or chair	Recommend approval	Recommen disapproval (attach explanation)	Date

9. APPROVAL

Chair of submitting department *D. Mead*
 College Curriculum Committee *Jim L. Woods*
 College Dean *Dorothy A. Reed*

Date
12/4/95
12/15/95
12/15/95

University of Washington
Curriculum Review Committee
COURSE CHANGE APPLICATION

APPROVED
MAR 13 1999

Prefix (6 characters max.)

A A

Number

210

Offered jointly with:

Prefix (6 characters max.)

Number

College or School College of Engineering	Department Department of Aeronautics and Astronautics	Date 12/7/98
Course Title Engineering Statics		Credits 4

1. PURPOSE OF REQUEST (Check all that apply)

- ☒ Permanent change, to be effective AUTUMN Quarter 19 99
☐ Temporary change, to be effective _____ Quarter 19 _____ through _____ Quarter 19 _____

	CURRENT DATA	NEW DATA
<input checked="" type="checkbox"/> Change prefix and/or number	ENGR 210	A A 210
<input type="checkbox"/> Change course title		
<input type="checkbox"/> Change abbreviated title (19 spaces max.)		
<input type="checkbox"/> Change credits		
<input type="checkbox"/> Change prerequisites		

- | | |
|---|---|
| <input type="checkbox"/> Change joint status | <input type="checkbox"/> Change catalog data |
| <input type="checkbox"/> Change contact hours | <input type="checkbox"/> Change resource requirements |
| <input type="checkbox"/> Change to permanent CR/NC only | <input type="checkbox"/> Drop permanent CR/NC only |
| <input type="checkbox"/> Drop course | |

Attach a course outline and reading list if requesting an increase in course level or credits or a substantial change in content.

2. JUSTIFICATION

Explain why this change is being proposed, including its relationship to your overall curriculum.
(Attach additional sheet if necessary.)

MANAGEMENT OF THIS COURSE IS BEING TRANSFERRED TO THE DEPARTMENT OF AERONAUTICS AND ASTRONAUTICS. THE COURSE CONTENT WILL NOT BE CHANGED.

3. CATALOG DATA (Complete only if changed)

Catalog description (*please double space*)
(50-word limit, including prerequisites and "Offered jointly with XXX 100" if applicable)

Catalog subheading (if any) for this course within your department _____
 Names and ranks of probable instructors (include curriculum vitae for any instructor not now on the University faculty) _____

Quarter(s) offered (A, W, Sp, S) _____

- ☐ Include in General Catalog
☐ Include in General Catalog

4. CREDITS AND HOURS (Complete only if changed)

a. Contact and outside hours: 1 credit represents a total time commitment of 3 hours per week of student effort.

Contact hours per week		
Lecture _____	Laboratory _____	
Quiz section _____	Studio _____	
Seminar _____	Other* _____	
* Attach explanation and justification for "other" contact hours.		TOTAL CONTACT HOURS:
How many additional hours will a student be expected to spend each week in preparation for this course?		OUTSIDE HOURS:
		TOTAL WEEKLY CONTACT AND OUTSIDE HOURS:

b. If variable credit, how will the number of credits awarded be related to the amount of student effort required?

c. How will students be evaluated for credit or grades?

5. STUDENTS (Complete only if changed)

a. Anticipated enrollment per quarter: _____

b. Types of students expected (undergraduate majors, undergraduate non-majors, graduate or professional students):

6. RESOURCES (Complete only if changed)

Will additional resources be required to teach this course, including new space, equipment, computer, library, or other instructional resources?
Please explain.

7. JOINT COURSE

List all departments, schools, or colleges participating. Joint course applications require a signature from each unit.
(If units from more than one school or college participate, a separate application must be filed by each.)

Name of unit (List the unit responsible for administering the course first)	Course prefix and number	Add joint status	Drop joint status	Signature of chair

8. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED

If this course includes subject matter currently dealt with by any other University units, the originating department must circulate this application for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this application.

Name of unit	Signature of dean or chair	Recommend approval	Recommend disapproval (attach explanation)	Date
Dept. of Engineering	Mani Soma	X		12-8-98

9. APPROVAL

Chair of submitting department

College Curriculum Committee

College Dean

Adam Buckner

Mani Soma

Mani Soma

12/14/98

12/15/98

2/24/99

University of Washington
Curriculum Review Committee
COURSE CHANGE APPLICATION

APPROVED
MAR 15 1999

Prefix (6 characters max.)

A A

Number

210

Offered jointly with:

Prefix (6 characters max.)

Number

College or School Department
College of Engineering Department of Aeronautics and Astronautics

Date
12/7/98

Course Title
Engineering Statics

Credits
4

1. PURPOSE OF REQUEST (Check all that apply)

☒ Permanent change, to be effective AUTUMN Quarter 19 99

☐ Temporary change, to be effective _____ Quarter 19 _____ through _____ Quarter 19 _____

	CURRENT DATA	NEW DATA
<input checked="" type="checkbox"/> Change prefix and/or number	ENGR 210	A A 210
<input type="checkbox"/> Change course title		
<input type="checkbox"/> Change abbreviated title (19 spaces max.)		
<input type="checkbox"/> Change credits		
<input type="checkbox"/> Change prerequisites		

- ☐ Change joint status
☐ Change contact hours
☐ Change to permanent CR/NC only
☐ Drop course

- ☐ Change catalog data
☐ Change resource requirements
☐ Drop permanent CR/NC only

Attach a course outline and reading list if requesting an increase in course level or credits or a substantial change in content.

2. JUSTIFICATION

Explain why this change is being proposed, including its relationship to your overall curriculum.
(Attach additional sheet if necessary.)

MANAGEMENT OF THIS COURSE IS BEING TRANSFERRED TO THE DEPARTMENT OF AERONAUTICS AND ASTRONAUTICS. THE COURSE CONTENT WILL NOT BE CHANGED.

3. CATALOG DATA (Complete only if changed)

Catalog description (*please double space*)
(50-word limit, including prerequisites and "Offered jointly with XXX 100" if applicable)

Catalog subheading (if any) for this course within your department _____
Names and ranks of probable instructors (Include curriculum vitae for any instructor not now on the University faculty)

Quarter(s) offered (A, W, Sp, S) _____

- ☐ Include in General Catalog
☐ Include in General Catalog

4. CREDITS AND HOURS (Complete only if changed)

a. Contact and outside hours: 1 credit represents a total time commitment of 3 hours per week of student effort.

Contact hours per week		
Lecture _____	Laboratory _____	
Quiz section _____	Studio _____	
Seminar _____	Other* _____	
*Attach explanation and justification for "other" contact hours.		TOTAL CONTACT HOURS:
How many additional hours will a student be expected to spend each week in preparation for this course?		OUTSIDE HOURS:
TOTAL WEEKLY CONTACT AND OUTSIDE HOURS:		

b. If variable credit, how will the number of credits awarded be related to the amount of student effort required?

c. How will students be evaluated for credit or grades?

5. STUDENTS (Complete only if changed)

a. Anticipated enrollment per quarter: _____.

b. Types of students expected (undergraduate majors, undergraduate non-majors, graduate or professional students):

6. RESOURCES (Complete only if changed)

Will additional resources be required to teach this course, including new space, equipment, computer, library, or other instructional resources? Please explain.

7. JOINT COURSE

List all departments, schools, or colleges participating. Joint course applications require a signature from each unit. (If units from more than one school or college participate, a separate application must be filed by each.)

Name of unit (List the unit responsible for administering the course first)	Course prefix and number	Add joint status	Drop joint status	Signature of chair

8. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED

If this course includes subject matter currently dealt with by any other University units, the originating department must circulate this application for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this application.

Name of unit	Signature of dean or chair	Recommend approval	Recommend disapproval (attach explanation)	Date
Dept. of Engineering	Mani Soma	X		12-8-98

9. APPROVAL

Chair of submitting department

College Curriculum Committee

College Dean

Mani Soma
Mani Soma

12/14/98

12/15/98

2/24/99

University of Washington
Curriculum Review Committee
COURSE CHANGE APPLICATION

Approved
1/24/96

Prefix (5 characters max.)

ENGR

New number

210

Offered jointly with:

Prefix (5 characters max.)

New number

College or School College of Engineering	Department	Subdepartment	Date 11-29-95
Course Title Engineering Statics			Credits 4

1. PURPOSE OF REQUEST (Check all that apply)

- ☒ Permanent change, to be effective Winter ^{AUT} Quarter 19 96
☐ Temporary change, to be effective _____ Quarter 19 _____ through _____ Quarter 19 _____

	CURRENT DATA	NEW DATA
<input type="checkbox"/> Change prefix and/or number		
<input type="checkbox"/> Change course title		
<input type="checkbox"/> Change abbreviated title (19 spaces max.)		
<input type="checkbox"/> Change credits		
<input type="checkbox"/> Change prerequisites		

- ☐ Change joint status
☐ Change contact hours
☐ Change to permanent CR/NC only
☐ Drop course
☒ Change catalog data
☐ Change resource requirements
☐ Drop permanent CR/NC only

Attach a course outline and reading list if requesting an increase in course level or credits, or a substantial change in content.

2. JUSTIFICATION

Explain why this change is being proposed, including the relationship of this course to your overall curriculum.
 (Attach additional sheet if necessary.)

Revised description more accurately describes the course content.

3. CATALOG DATA (Complete only if changed)

New catalog description (please double space)

(50-word limit, including prerequisites and "Offered jointly with XXX 100" if applicable)

Vector analysis applied to equilibrium of rigid body systems and subsystems, Force and moment resultants, free body diagrams, internal forces, and friction. Analysis of basic structural and machine systems and components. Prerequisites: MATH 126, PHYS 121, and recommended: graphics background. Offered: AWSpS.

Catalog subheading (if any) for this course within your department _____

Names and ranks of probable instructors (Include curriculum vitae for any instructor not now on the University faculty)

Quarter(s) offered (A, W, Sp, S) AWSpS

☐ Include in General Catalog

☐ Include in General Catalog

4. CREDITS AND HOURS (Complete only if changed)

a. Contact and outside hours: 1 credit represents a total time commitment of 3 hours per week of student effort.

Contact hours per week		
Lecture _____	Laboratory _____	
Quiz section _____	Studio _____	
Seminar _____	Other* _____	
*Attach explanation and justification for "other" contact hours.		TOTAL CONTACT HOURS:
How many additional hours will a student be expected to spend each week in preparation for this course?		OUTSIDE HOURS:
		TOTAL WEEKLY CONTACT AND OUTSIDE HOURS:

b. If variable credit, how will the number of credits awarded be related to the amount of student effort required?

c. How will students be evaluated for credit or grades?

5. STUDENTS (Complete only if changed)

a. Anticipated enrollment per quarter: _____

b. Types of students expected (undergraduate majors, undergraduate non-majors, graduate or professional students):

6. RESOURCES (Complete only if changed)

Will additional resources will be required to teach this course, including new space, equipment, computer, library, or other instructional resources? Please explain.

7. JOINT COURSE

List all departments, schools, or colleges participating. Joint course applications require a signature from each unit. (If units from more than one school or college participate, a separate application must be filed by each.)

Name of unit (List the unit responsible for administering the course first)	Course prefix and number	Add joint status	Drop joint status	Signature of chair

8. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED

If this course includes subject matter currently dealt with by any other University units, the originating department must circulate this application for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this application.

Name of unit	Signature of dean or chair	Recommend approval	Recommended disapproval (attach explanation)	Date

9. APPROVAL

Chair of submitting department	<u><i>D. Meed</i></u>	Date	<u>12/4/95</u>
College Curriculum Committee	<u><i>Sam L. Womack</i></u>		<u>12/15/95</u>
College Dean	<u><i>Dorothy A. Reed</i></u>		<u>12/15/95</u>

6/21/78

UNIVERSITY OF WASHINGTON CURRICULUM BOARD
COURSE CHANGE APPLICATION

APPROVED JUN 29 78

Prefix	Number
E N G R	180
Joint Course Prefix and Number	

210

College or School ENGR Department ENGR Date 6/15/78

Applications for major change in course content should be submitted on a NEW COURSE APPLICATION form.

- ☐ Permanent change, to be effective _____ Quarter 19_____
☒ Temporary change, to be effective Fall Quarter 1978 through _____ Quarter 19_____
3/78

1. JUSTIFICATION FOR THIS ACTION AND ANTICIPATED IMPACT (continue on separate sheet if necessary): Recently, Spr. 1978, the course number was changed to 210. This request is to delay the change from Fall 1978 to Wtr 1979. The timing on the change was such that students preregistering for Fall have signed for 180.

If an increase in credit or course level is requested, attach a justification and description of additions or changes in content.

2. CATALOG DATA:

	OLD (complete all items)	NEW (complete only changed items)
Prefix and number*	Engr 210	180
Title	chg 210 repl 180 eff. date from (eff. A 78) to (eff. W 79)	
Abbreviated title (19 spaces)	(chg in course descr + preg.)	
Credits		

- ☐ New prerequisites ☐ Change to permanent CR/NC only * New number at top of page
☐ New course description ☐ Drop permanent CR/NC only
(See reverse side) ☐ May be repeated for credit ☐ Drop course

It is customary to allow a maximum of 1 credit for each 3 hours of total student effort required each week. If the credit assigned does not follow this rule, please attach a statement of justification.

3. JOINT COURSE (if this is a joint course complete this section):

- a. University unit responsible for administration of the course _____
b. Course prefix and number in other unit(s) _____
c. Signature of Chairman of that unit(s) _____

- ☐ Change to joint status ☐ Drop joint status ☐ Joint status remains the same

4. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED:

If this course includes subject matter currently dealt with by other University units, the originating department should circulate this application for review by those units. If this is not done, the college curriculum committee or the University Curriculum Board will do so, which may delay action on this application.

Name of unit	Signature of Dean or Chairman	Recommend approval	Recommend disapproval*	Date
_____	_____			_____
_____	_____			_____

* Please attach explanations

5. APPROVAL:

Chairman	<u>T.W. Macartney</u>	Date	<u>6/16/78</u>
College Curriculum Committee	<u>K.T. Gault</u>		<u>6/21/78</u>
College Dean	<u>K.T. Gault</u>		<u>6/21/78</u>
Graduate School Dean	_____		_____
University Curriculum Board	_____		_____

COMPLETE OTHER SIDE OF THIS FORM IF COURSE DESCRIPTION IS CHANGED

9

D

3/12

2

(It is common sense & logic.)
 Cgd. off. date from (off. 4.78) to (off. 4.72)

**UNIVERSITY OF WASHINGTON CURRICULUM BOARD
COURSE CHANGE APPLICATION**

Prefix				Number
E	N	G	R	210 180
Joint Course Prefix and Number				

APPROVED

MAR 23 78

College or School Engineering Department Engineering Date 2/10/78

Applications for major change in course content should be submitted on a NEW COURSE APPLICATION form.

☒ Permanent change, to be effective Fall Quarter 19 78
☐ Temporary change, to be effective _____ Quarter 19 _____ through _____ Quarter 19 _____

1. JUSTIFICATION FOR THIS ACTION AND ANTICIPATED IMPACT (continue on separate sheet if necessary):

1. Add pre-requisites of Math 126, Physics 121, Graphics 1 unit.
2. Change from freshman 100 level to sophomore 200 level
3. See attachment

If an increase in credit or course level is requested, attach a justification and description of additions or changes in content.

2. CATALOG DATA:

	OLD (complete <i>all</i> items)	NEW (complete only changed items)
Prefix and number*	ENGR 180	ENGR 210
Title	Engineering Statics	
Abbreviated title (19 spaces)	Engr Statics	
Credits	4	

- ☒ New prerequisites ☐ Change to permanent CR/NC only * New number at top of page
☐ New course description ☐ Drop permanent CR/NC only
☐ (See reverse side) ☐ May be repeated for credit ☐ Drop course

It is customary to allow a maximum of 1 credit for each 3 hours of total student effort required each week. If the credit assigned does not follow this rule, please attach a statement of justification.

3. JOINT COURSE (if this is a joint course complete this section):

- a. University unit responsible for administration of the course _____
- b. Course prefix and number in other unit(s) _____
- c. Signature of Chairman of that unit(s) _____

☐ Change to joint status ☐ Drop joint status ☐ Joint status remains the same

4. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED:

If this course includes subject matter currently dealt with by other University units, the originating department should circulate this application for review by those units. If this is not done, the college curriculum committee or the University Curriculum Board will do so, which may delay action on this application.

Name of unit	Signature of Dean or Chairman	Recommend approval	Recommend disapproval*	Date

* Please attach explanations

5. APPROVAL:

Chairman <u>T. W. Macartney</u>	Date <u>2/13/78</u>
College Curriculum Committee <u>K. S. Gault</u>	<u>3/14/78</u>
College Dean <u>K. S. Gault</u>	<u>3/14/78</u>
Graduate School Dean _____	_____
University Curriculum Board _____	_____

COMPLETE OTHER SIDE OF THIS FORM IF COURSE DESCRIPTION IS CHANGED

COMPLETE THIS SECTION ONLY IF COURSE DESCRIPTION IS CHANGED

CATALOG DATA:

Course prefix ENGR Course title Engineering Statics
and No. 180-210
Credits 4 Quarter(s) offered (A, W, Sp, and/or S) AWSpS ☐*
☐ Permanent CR/NC only
Last name(s) of instructor(s): Alexander ☒*

New General Catalog description (please double space):

* Check here if to be included in General Catalog

Principles of statics, basic concepts, parallelogram law, Newton's law^s, resultants, force-couple relationships, equilibrium diagrams, equilibrium analysis, three-dimensional structures, two-dimensional frames, trusses, beams, and friction. Vector algebra used throughout the course. Graphics background recommended.

Prerequisites: Math 126, Phys 121; graphics recommended.

Desirable preparation or prerequisites to be included in General Catalog description (normally required for 300- or 400-level courses):

121
Math 126 Physis ~~161~~. Graphics recommended

Abbreviated title for transcripts (not to exceed 19 characters, including spaces)

Former General Catalog description:

**UNIVERSITY OF WASHINGTON CURRICULUM BOARD
COURSE CHANGE APPLICATION**

3/11/71

ENGR 180

New course prefix and number

Department, School, or College Engineering

APPROVED

Date submitted 2/16/71

RESTRICTIONS:

Courses changed with this form do not become new courses, and students taking the original and the changed courses will not receive credit for both. If it is desired that students receive credit for both the original course and the changed course, the original should be dropped with this form and the new course applied for on the NEW COURSE APPLICATION form, or a maximum number of credits for this course should be specified below.

APPLICATION FOR:

(Check as many boxes as are appropriate.)

☒ Permanent change ☐ Temporary change for _____ Quarter 19 _____

☒ Change of title a. Old title Statics

List new title in 2. a.

b. New abbreviated title for transcripts Vectors, Statics Engr. Statics

Not to exceed 19 characters, including spaces

☐ Increasing course number to higher level. Old prefix and number _____

☒ Other change of number. Old prefix and number GE 112

☐ Increasing credits by more than 1 credit. Old credits _____

☒ Other change of credit. Old credits 3

☐ Course to be dropped.

☒ Other (specify) _____

Course description change

Detail on other side of this form

List new prefix, number, and/or credits in 2. b.

1. JUSTIFICATION FOR THIS ACTION: Change prefix and number to fit new College curriculum in the technical breadth area. Addition of vectors and more detailed course description.

[Signature]

2. CATALOG DATA:

a. Course title ~~Vectors, Statics~~ Engineering Statics

b. Course prefix and number ENGR 180 Credits 4

e.g., CMU 200

c. In undergraduate courses it is customary to allow a maximum of 1 credit for each hour of lecture or quiz session a week and 1 credit for each two hours of laboratory work a week. Departures from this procedure must be justified.

3. IS THIS A JOINT COURSE?

☒ No

☐ Yes a. Other Department, School, or College _____

b. Course prefix and number in that unit _____

c. Signature of Chairman of that unit _____

4. SCHEDULING:

(An approved change will not appear in the Time Schedule until appropriate Time Schedule forms are completed by the offering unit.)

a. Name of faculty member in charge of course Alexander Rank Assoc. Prof.

b. Change is to take effect Autumn Quarter 19 71

5. OTHER COLLEGES, SCHOOLS, OR DEPARTMENTS AFFECTED:

(If this course covers areas also covered by other units in the University, it is essential that this application be reviewed by those units and that agreement to the course change by those units indicated by signatures below.)

Name of unit(s)	Signature of Dean or Chairman	Comments	Date
_____	_____	_____	_____

6. APPROVAL:

Chairman T. McCartney

College Curriculum Committee _____

Dean _____

University Curriculum Board _____

Date 2/19/71
MAR 9 1971
MAR 9 1971

[Signature: Vernon B. Hammer]

ENGR 180 ~~VECTORS & STATICS~~ (4)
Engineering Statics

Principles of statics, basic concepts, parallelogram law, Newton's law, resultants, force-couple relationships, equilibrium diagrams, equilibrium analysis, three-dimensional structures, two-dimensional frames, trusses, friction, and virtual work. Vector algebra used throughout the course.