

UNIVERSITY OF MICHIGAN
College of Engineering
Curriculum Committee Meeting
Tuesday, November 18, 2014 – 1:30-3:00pm

Room 1180, Duderstadt Center

AGENDA

1. No Summary Meeting Notes Available
2. Course Approval Forms

CARF SUMMARIES

SUBJECT	COURSE#	ACTION	SUMMARY	EFFECTIVE TERM	MINIMUM GRADE REQUIRED FOR ENFORCED PREPREQ
CEE	460	Modification	Change course # to 480	FT 2015	no enforced prereq
CEE	970	New		WT 2015	
EECS	281	Modification	Credit and Enrollment Restrictions	WT 2015	Minimum grade of "C"
EECS	370	Modification	Prereq	WT 2015	Minimum grade of "C"
EECS	376	Modification	Prereq	WT 2015	Minimum grade of "C"
EECS	451	Modification	Change course # to 351/title/description/prereqs/credit level/etc	FT 2015	Minimum grade of "C"
EECS	595	Modification	X-listing	WT 2015	

Action Requested

- New Course
 Modification of Existing Course
 Deletion of Course

Complete the following sections:

- New Courses - B & C completely
 Modifications - A modified information, B & C completely
 Deletions - A & C completely

Date 9/25/2014

Effective Term Fall 2015

Course Offer Freq Indefinitely
 One term only

A. CURRENT LISTING

B. REQUESTED LISTING

Home Department	Course Number
CEE Civil & Environmental Engin	460
Cross Listed Course Information	
Course Title	
TITLE ABBREVIATION	Time Sched Max = 19 Spaces
	Transcript Max = 20 Spaces
Course Description	

Home Department	Course Number
CEE Civil & Environmental Engin	480
Cross Listed Course Information	
Course Title	
Design of Environmental Engineering Systems	
TITLE ABBREVIATION	Time Sched Max = 19 Spaces
	Des Env Engr Sys
	Transcript Max = 20 Spaces
	Des Env Engr Sys
Course Description for Official Publication (Max = 50 words)	
Design and theoretical understanding of environmental processes; biological, physical, and chemical processes, and reactor configurations commonly used for water quality control; applications to the design of specific water and wastewater treatment operations; discussion of pollution prevention and green engineering options.	

PROGRAM OUTCOMES: a c e g i k
 b d f h j

PROGRAM OUTCOMES: a c e g i k
 b d f h j

Degree Requirements Degree Requirement Free Elective Other
 Core Course Tech Elective

Degree Requirements Degree Requirement Free Elective Other
 Core Course Tech Elective

Prereq Enforced Advised

Prereq CEE 465
 Enforced Advised

Credit Restrictions

Credit Restrictions

Level of Credit	Credit Hours	Contact Hrs/Wk
<input type="checkbox"/> Undergrad only <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Non-Rckhm Grad <input type="checkbox"/> Ugrad or Rckhm Grad	Min Max	Number of Wks
<input type="checkbox"/> Ugrad or Non-Rckhm Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Rckhm Grad w/add'l Work		

Level of Credit	Credit Hours	Contact Hrs/Wk
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<input type="checkbox"/> Ugrad or Non-Rckhm Grad <input checked="" type="checkbox"/> All Credit types <input type="checkbox"/> Rckhm Grad w/add'l Work	3 3	3 14

Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?) Yes No Max Hours? 3 Max Times? 1 Can it be repeated in the same term? Yes No

Class Type(s) Lec Sem Dis Other Rec Lab Ind

Grading A-E CR/NC P/F S/U

Location Ann Arbor Biological Station Camp Davis Extension

Graded Section Lec Sem Dis Other Rec Lab Ind

Course Is Y Graded

Cognizant Faculty Member: Terese M. Olson
Title: Associate Professor

Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty

Approval Info Curriculum Comm. Faculty Cross listed Unit 1 Cross listed Unit 2

Approved by Name _____
Approved Date _____

Submitted By: Home Dept. Cross-listed Dept.

Department Chair Name	Chair Signature
Home Dept. Kim F. Hayes, Chair & Professor	
Cross-listed Civil & Environmental Engin	
Dept(s) _____	

Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

- New Courses - B & C completely
- Modifications - A modified information, B & C completely
- Deletions - A & C completely

Date 9/29/2014

Effective Term Winter 2015

Course Offer Freq Indefinitely
 One term only

A. CURRENT LISTING

B. REQUESTED LISTING

Home Department		Course Number
Cross Listed Course Information		
Course Title		
TITLE ABBREVIATION	Time Sched Max = 19 Spaces	
	Transcript Max = 20 Spaces	
Course Description		

Home Department		Course Number
CEE Civil & Environmental Engin		970
Cross Listed Course Information		
Course Title		
Infrastructure Systems Engineering Research		
TITLE ABBREVIATION	Time Sched Max = 19 Spaces	Infr Sys Engr Res
	Transcript Max = 20 Spaces	Infr Sys Engr Res
Course Description for Official Publication (Max = 50 words)		
Advanced problems in infrastructure systems engineering; a wide range of subject matter and method is available, including field investigations, laboratory experimentation, library and public record searches, and engineering design work.		

PROGRAM OUTCOMES: a c e g i k
 b d f h j

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 b d f h j

Degree Requirements Degree Requirement Free Elective Other
 Core Course Tech Elective

Degree Requirements Degree Requirement Free Elective Other
 Core Course Tech Elective

Prereq
 Enforced
 Advised

Prereq Permission of instructor.
 Enforced
 Advised

Credit Restrictions

Credit Restrictions

Level of Credit		Credit Hours Min Max	Contact Hrs/Wk Number of Wks
<input type="checkbox"/> Undergrad only <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Non-Rckhm Grad <input type="checkbox"/> Ugrad or Rckhm Grad	<input type="checkbox"/> Ugrad or Non-Rckhm Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Rckhm Grad w/add'l Work		

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Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?) Yes No Max Hours? 99 Max Times? 99 Can it be repeated in the same term? Yes No

Class Type(s)
 Lec Sem Dis Other Ind
 Rec Lab

Grading
 A-E CR/NC P/F S/U

Location
 Ann Arbor Biological Station Camp Davis Extension

Graded Section
 Lec Sem Dis Other Ind
 Rec Lab

Course Is Y Graded

Cognizant Faculty Member: _____ Title _____
 Jeff Scruggs Associate Professor

Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty

Approval Info
 Curriculum Comm. _____
 Faculty _____
 Cross listed Unit 1 _____
 Cross listed Unit 2 _____

Approved by Name _____
Approved Date _____

Submitted By: Home Dept. Cross-listed Dept.

Department	Chair Name	Chair Signature
Home Dept.	Kim F. Hayes, Chair & Professor	
Cross-listed Dept(s)	Civil & Environmental Engin	

THE UNIVERSITY OF MICHIGAN -- COLLEGE OF ENGINEERING
Course Approval Request

College Curriculum Committee, 1420 Lurie Engineering Center Building

Form Number

2544

Date **11/13/2014**

Effective Term **Winter 2015**

Course Offer Freq

Indefinitely
 One term only

Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

New Courses - B & C completely
 Modifications - A modified information, B & C completely
 Deletions - A & C completely

A. CURRENT LISTING

B. REQUESTED LISTING

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Home Department</td> <td style="width: 50%;">Course Number</td> </tr> <tr> <td><input type="checkbox"/> Cross Listed Course Information</td> <td></td> </tr> <tr> <td colspan="2">Course Title</td> </tr> <tr> <td>TITLE ABBREVIATION</td> <td>Time Sched Max = 19 Spaces Transcript Max = 20 Spaces</td> </tr> <tr> <td colspan="2">Course Description</td> </tr> <tr> <td colspan="2"> PROGRAM OUTCOMES: <input type="checkbox"/> a <input type="checkbox"/> c <input type="checkbox"/> e <input type="checkbox"/> g <input type="checkbox"/> i <input type="checkbox"/> k <input type="checkbox"/> b <input type="checkbox"/> d <input type="checkbox"/> f <input type="checkbox"/> h <input type="checkbox"/> j </td> </tr> <tr> <td colspan="2"> Degree Requirements <input type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input type="radio"/> Core Course <input type="radio"/> Other <input type="radio"/> Free Elective </td> </tr> <tr> <td colspan="2">Prereq EECS 203 and EECS 280</td> </tr> <tr> <td colspan="2"> <input checked="" type="radio"/> Enforced <input type="radio"/> Advised </td> </tr> <tr> <td colspan="2"> Credit Restrictions <input checked="" type="checkbox"/> Enrollment Restrictions [Fewer than 2 previous elections of EECS 281 (incl. grades of W & I)] and [No credit in EECS 281; (C or better)] </td> </tr> <tr> <td> Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> Ugrad or Non-Rckhm Grad <input type="checkbox"/> Rackham Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Non-Rckhm Grad <input type="checkbox"/> Rckhm Grad w/add'l Work <input type="checkbox"/> Ugrad or Rckhm Grad </td> <td> Credit Hours Contact Hrs/Wk Min Max _____ Number of Wks _____ </td> </tr> </table>	Home Department	Course Number	<input type="checkbox"/> Cross Listed Course Information		Course Title		TITLE ABBREVIATION	Time Sched Max = 19 Spaces Transcript Max = 20 Spaces	Course Description		PROGRAM OUTCOMES: <input type="checkbox"/> a <input type="checkbox"/> c <input type="checkbox"/> e <input type="checkbox"/> g <input type="checkbox"/> i <input type="checkbox"/> k <input type="checkbox"/> b <input type="checkbox"/> d <input type="checkbox"/> f <input type="checkbox"/> h <input type="checkbox"/> j		Degree Requirements <input type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input type="radio"/> Core Course <input type="radio"/> Other <input type="radio"/> Free Elective		Prereq EECS 203 and EECS 280		<input checked="" type="radio"/> Enforced <input type="radio"/> Advised		Credit Restrictions <input checked="" type="checkbox"/> Enrollment Restrictions [Fewer than 2 previous elections of EECS 281 (incl. grades of W & I)] and [No credit in EECS 281; (C or better)]		Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> Ugrad or Non-Rckhm Grad <input type="checkbox"/> Rackham Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Non-Rckhm Grad <input type="checkbox"/> Rckhm Grad w/add'l Work <input type="checkbox"/> Ugrad or Rckhm Grad	Credit Hours Contact Hrs/Wk Min Max _____ Number of Wks _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Home Department</td> <td style="width: 50%;">Course Number</td> </tr> <tr> <td>EECS Elec Engin & Computer Sci</td> <td>281</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> Cross Listed Course Information</td> </tr> <tr> <td colspan="2">Course Title</td> </tr> <tr> <td>TITLE ABBREVIATION</td> <td>Time Sched Max = 19 Spaces Transcript Max = 20 Spaces</td> </tr> <tr> <td colspan="2"> Data Struc & Alg Data Str Alg </td> </tr> <tr> <td colspan="2"> Course Description for Official Publication (Max = 50 words) Introduction to algorithm analysis and O-notation; Fundamental data structures including lists, stacks, queues, priority queues, hash tables, binary trees, search trees, balanced trees, and graphs; searching and sorting algorithms; recursive algorithms; basic graph algorithms; introduction to greedy algorithms and divide and conquer strategy. 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Cognizant Faculty Member: Title H V Jagdish Prof.																																																	
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Submitted By: <input checked="" type="checkbox"/> Home Dept. <input type="checkbox"/> Cross-listed Dept.																																																	
Approval Info Approved by Name Approved Date <input checked="" type="checkbox"/> Curriculum Comm. _____ _____ <input type="checkbox"/> Faculty _____ _____ <input type="checkbox"/> Cross listed Unit 1 _____ _____ <input type="checkbox"/> Cross listed Unit 2 _____ _____																																																	
Department Chair Name Chair Signature Home Dept. CSE Kevin Compton _____ Cross-listed _____ _____																																																	

Dept(s)

Form Number

2544

SUPPORTING STATEMENT

Math 465 and Math 565 provide equivalent background to EECS 203.

Are any special resources or facilities required for this course? Yes No

Detail the Special requirements

THE UNIVERSITY OF MICHIGAN -- COLLEGE OF ENGINEERING
Course Approval Request

College Curriculum Committee, 1420 Lurie Engineering Center Building

Form Number

2543

Date **11/13/2014**

Effective Term **Winter 2015**

Course Offer Freq

Indefinitely
 One term only

Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

New Courses - B & C completely
 Modifications - A modified information, B & C completely
 Deletions - A & C completely

A. CURRENT LISTING

B. REQUESTED LISTING

Home Department _____	Course Number _____	Home Department _____	Course Number _____
<input type="checkbox"/> Cross Listed Course Information		EECS Elec Engin & Computer Sci	370
<input type="checkbox"/> Course Title		Cross Listed Course Information	
<input type="checkbox"/> Course Title		Course Title	
<input type="checkbox"/> Course Description		Introduction to Computer Organization	
<input type="checkbox"/> Course Description		Intro Comp Organiz	
<input type="checkbox"/> Course Description		Intr Comp Org	
<input type="checkbox"/> Course Description		Course Description for Official Publication (Max = 50 words)	
<input type="checkbox"/> Course Description		Basic concepts of computer organization and hardware. Instructions executed by a processor and how to use these instructions in simple assembly-language programs. Stored-program concept. Datapath and control for multiple implementations of a processor. Performance evaluation, pipelining, caches, virtual memory, input/output.	

PROGRAM OUTCOMES: <input checked="" type="checkbox"/> a <input checked="" type="checkbox"/> c <input checked="" type="checkbox"/> e <input type="checkbox"/> g <input type="checkbox"/> i <input type="checkbox"/> k <input checked="" type="checkbox"/> b <input type="checkbox"/> d <input type="checkbox"/> f <input type="checkbox"/> h <input type="checkbox"/> j	PROGRAM OUTCOMES: <input checked="" type="checkbox"/> a <input checked="" type="checkbox"/> c <input checked="" type="checkbox"/> e <input type="checkbox"/> g <input type="checkbox"/> i <input checked="" type="checkbox"/> k <input checked="" type="checkbox"/> b <input type="checkbox"/> d <input type="checkbox"/> f <input type="checkbox"/> h <input type="checkbox"/> j
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Degree Requirements <input type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input type="radio"/> Core Course <input type="radio"/> Other	Degree Requirements <input checked="" type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input type="radio"/> Core Course <input type="radio"/> Other
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Prereq (EECS 203 or or EECS 270) and (EECS 280 or EECS 283) <input type="radio"/> Enforced <input checked="" type="radio"/> Advised	Prereq ((EECS 203 or Math 465 or Math 565) or EECS 270) and (EECS 280 or EECS 283) and (c or better) or equivalent <input checked="" type="radio"/> Enforced <input type="radio"/> Advised
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Credit Restrictions	Credit Restrictions
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Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Non-Rckhm Grad <input type="checkbox"/> Ugrad or Rckhm Grad	<input type="checkbox"/> Ugrad or Non-Rckhm Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Rckhm Grad w/add'l Work	Credit Hours Min Max	Contact Hrs/Wk Number of Wks	Level of Credit <input checked="" type="checkbox"/> Undergrad only <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Non-Rckhm Grad <input type="checkbox"/> Ugrad or Rckhm Grad	<input type="checkbox"/> Ugrad or Non-Rckhm Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Rckhm Grad w/add'l Work	Credit Hours Min Max	Contact Hrs/Wk Number of Wks

Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?) <input type="radio"/> Yes <input checked="" type="radio"/> No	Max Hours? _____	Max Times? _____	Can it be repeated in the same term? <input type="radio"/> Yes <input checked="" type="radio"/> No
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Class Type(s) <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Ind	Grading <input checked="" type="checkbox"/> A-E <input type="checkbox"/> CR/NC <input type="checkbox"/> P/F <input type="checkbox"/> S/U	Location <input checked="" type="checkbox"/> Ann Arbor <input type="checkbox"/> Biological Station <input type="checkbox"/> Camp Davis <input type="checkbox"/> Extension	Cognizant Faculty Member: Valeria Bertacco Scott Mahlke	Title Prof. Prof.
Graded Section <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input type="checkbox"/> Lab <input type="checkbox"/> Ind	Course Is Y Graded <input type="checkbox"/>			
Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty				

Approval Info <input checked="" type="checkbox"/> Curriculum Comm. <input type="checkbox"/> Faculty <input type="checkbox"/> Cross listed Unit 1 <input type="checkbox"/> Cross listed Unit 2	Approved by Name _____	Approved Date _____	Submitted By: <input checked="" type="checkbox"/> Home Dept. <input type="checkbox"/> Cross-listed Dept.	Department Chair Name Home Dept. EECS KevinCompton	Chair Signature _____
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Dept(s) _____

Form Number

2543

SUPPORTING STATEMENT

Math 465 and Math 565 provide equivalent background to EECS 203.

Are any special resources or facilities required for this course? Yes No

Detail the Special requirements

THE UNIVERSITY OF MICHIGAN -- COLLEGE OF ENGINEERING

Course Approval Request

College Curriculum Committee, 1420 Lurie Engineering Center Building

Form Number

2542

Date 11/13/2014

Effective Term Winter 2015

Course Offer Freq

Indefinitely
 One term only

Action Requested

- New Course
- Modification of Existing Course
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A. CURRENT LISTING

B. REQUESTED LISTING

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Dept(s) _____

Form Number

2542

SUPPORTING STATEMENT

Math 465 and Math 565 provide equivalent background to EECS 203.

Are any special resources or facilities required for this course? Yes No

Detail the Special requirements

.....
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.....
.....
.....
.....

Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

- New Courses - B & C completely
- Modifications - A modified information, B & C completely
- Deletions - A & C completely

Effective Term Fall 2015

Course Offer Freq Indefinitely
 One term only

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Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?) <input type="radio"/> Yes <input checked="" type="radio"/> No Max Hours? _____ Max Times? _____ Can it be repeated in the same term? <input type="radio"/> Yes <input checked="" type="radio"/> No																																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Class Type(s) <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input checked="" type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input type="checkbox"/> Lab <input type="checkbox"/> Ind</td> <td style="width: 30%;">Grading <input checked="" type="checkbox"/> A-E <input type="checkbox"/> CR/NC <input type="checkbox"/> P/F <input type="checkbox"/> S/U</td> <td style="width: 40%;">Location <input checked="" type="checkbox"/> Ann Arbor <input type="checkbox"/> Biological Station <input type="checkbox"/> Camp Davis <input type="checkbox"/> Extension</td> </tr> <tr> <td colspan="3">Graded Section <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input type="checkbox"/> Lab <input type="checkbox"/> Ind</td> </tr> <tr> <td colspan="3" style="text-align: right;">Course Is Y Graded <input type="checkbox"/></td> </tr> </table>	Class Type(s) <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input checked="" type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input type="checkbox"/> Lab <input type="checkbox"/> Ind	Grading <input checked="" type="checkbox"/> A-E <input type="checkbox"/> CR/NC <input type="checkbox"/> P/F <input type="checkbox"/> S/U	Location <input checked="" type="checkbox"/> Ann Arbor <input type="checkbox"/> Biological Station <input type="checkbox"/> Camp Davis <input type="checkbox"/> Extension	Graded Section <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input type="checkbox"/> Lab <input type="checkbox"/> Ind			Course Is Y Graded <input type="checkbox"/>			Cognizant Faculty Member: _____ Title _____ Laura Balzano Asst. Prof. Andrew E. Yagle Prof. _____ _____ Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty																																											
Class Type(s) <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input checked="" type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input type="checkbox"/> Lab <input type="checkbox"/> Ind	Grading <input checked="" type="checkbox"/> A-E <input type="checkbox"/> CR/NC <input type="checkbox"/> P/F <input type="checkbox"/> S/U	Location <input checked="" type="checkbox"/> Ann Arbor <input type="checkbox"/> Biological Station <input type="checkbox"/> Camp Davis <input type="checkbox"/> Extension																																																			
Graded Section <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Sem <input type="checkbox"/> Dis <input type="checkbox"/> Other <input type="checkbox"/> Rec <input type="checkbox"/> Lab <input type="checkbox"/> Ind																																																					
Course Is Y Graded <input type="checkbox"/>																																																					
Approval Info <input type="checkbox"/> Curriculum Comm.	Approved by Name _____	Approved Date _____	Submitted By: <input type="checkbox"/> Home Dept. <input type="checkbox"/> Cross-listed Dept.																																																		
<input type="checkbox"/> Faculty <input type="checkbox"/> Cross listed Unit 1 <input type="checkbox"/> Cross listed Unit 2	_____	_____	Department Chair Name Home Dept. EECS Jamie Philips Cross-listed _____																																																		
			Chair Signature _____																																																		

SUPPORTING STATEMENT

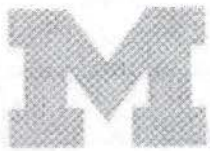
EECS 451, "Digital Signal Processing and Analysis," has the prerequisite "EECS 216 or graduate standing." This has 2 problems: (1) The material covered is junior-level, in the unanimous opinion of the signal processing area faculty; and (2) graduate students have not taken EECS 216, which is the continuous-time version of the first part of EECS 451. A 300-level course will reflect the level of the material, and since all students will have now taken EECS 216, the first part of the course can actually proceed faster. This, along with deletion of some obsolete material (IIR filter design, algebraic FIR filter design), will allow the introduction of basic image processing, discrete-time wavelets and filter banks, and more applications than EECS 451 has at present.

Undergraduates would have recently-added EECS 453 available as an 400-level upper-level elective. For Winter term 2014, enrollment was 104 undergraduate and 35 graduate students, so providing a course tailored for ECE undergraduates alone is desirable. Graduate students interested in signal processing should take EECS 551.

Are any special resources or facilities required for this course? Yes No

Detail the Special requirements

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.....
.....
.....
.....
.....



Course Approval Request Form
Office of the Registrar, University of Michigan

1210 LSA Building
500 S. State Street
Ann Arbor, MI 48109-1382
Phone: 734.763.2113
Fax: 734.936.3148
ro.curriculum@umich.edu
ro.umich.edu

↓ CHECK APPROPRIATE BOXES FOR ALL CHANGES

Action Requested

- New Course
 Modification of Existing Course
 Deletion of Existing Course

Date of Submission:
Effective Term: Winter 2015

<input type="checkbox"/>	Course Offered	RO USE ONLY Date Received: Date Completed: Completed By:
	<input type="checkbox"/> Indefinitely	
	<input type="checkbox"/> One term only	

CURRENT LISTING

REQUESTED LISTING

<input type="checkbox"/>	Dept (Home): Elec Engineering & Computer Science			Dept (Home):		
<input type="checkbox"/>	Subject: EECS			Subject:		
<input type="checkbox"/>	Catalog: 595			Catalog:		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Course is Cross-Listed with Other Departments			<input type="checkbox"/> Course is Cross-Listed with Other Departments		
<input checked="" type="checkbox"/>	Department Information	Subject SI	Catalog Number 561	Department Information	Subject SI	Catalog Number 561
<input type="checkbox"/>	Information	SI	761	Linguistics	LING	541
<input type="checkbox"/>	Linguistics	LING	541			
<input type="checkbox"/>	Course Title (full title)			Course Title (full title)		
<input type="checkbox"/>	Abbreviated Title (20 char)			Abbreviated Title (20 char)		
<input type="checkbox"/>	Course Description (Please limit to 50 words and attach separate sheet if necessary)					
<input type="checkbox"/>	Full Term Credit Hours			Half Term Credit Hours		
<input type="checkbox"/>	Undergraduate Min:	Graduate Min:	Undergraduate Min:	Graduate Min:	Undergraduate Max:	Graduate Max:
<input type="checkbox"/>	Undergraduate Max:	Graduate Max:	Undergraduate Max:	Graduate Max:		
<input type="checkbox"/>	Course Credit Type select one					
<input type="checkbox"/>	Repeatability					
<input type="checkbox"/>	<input type="checkbox"/> Course is Repeatable for Credit			<input type="checkbox"/> Course is Y graded		
<input type="checkbox"/>	Maximum number of repeatable credits:			<input type="checkbox"/> Can be taken more than once in the same term		

Subject: EECS Catalog: 595

<input type="checkbox"/>	Grading Basis	Add Consent	Drop Consent
	<input type="checkbox"/> Graded (A – E)	<input type="checkbox"/> Department Consent	<input type="checkbox"/> Department Consent
	<input type="checkbox"/> Credit/No Credit	<input type="checkbox"/> Instructor Consent	<input type="checkbox"/> Instructor Consent
	<input type="checkbox"/> Satisfactory/Unsatisfactory	<input type="checkbox"/> No Consent	<input type="checkbox"/> No Consent
	<input type="checkbox"/> Pass/Fail		
	<input type="checkbox"/> Business Administration Grading		
	<input type="checkbox"/> Not for Credit		
	<input type="checkbox"/> Not for Degree Credit		
	<input type="checkbox"/> Degree Credit Only		

CURRENT LISTING

REQUESTED LISTING

<input type="checkbox"/>	Advisory Prerequisite (254 char)	Advisory Prerequisite (254 char)
<input type="checkbox"/>	Enforced Prerequisite (254 char)	Enforced Prerequisite (254 char)
<input type="checkbox"/>	Minimum grade requirement:	Minimum grade requirement:
<input type="checkbox"/>	Credit Exclusions	Credit Exclusions

<input type="checkbox"/>	Course Components	Graded Component	Terms Typically Offered (Please select only one) [blank] or [blank]
	<input type="checkbox"/> Lecture	<input type="checkbox"/>	
	<input type="checkbox"/> Seminar	<input type="checkbox"/>	
	<input type="checkbox"/> Recitation	<input type="checkbox"/>	
	<input type="checkbox"/> Lab	<input type="checkbox"/>	
	<input type="checkbox"/> Discussion	<input type="checkbox"/>	
	<input type="checkbox"/> Independent Study	<input type="checkbox"/>	

Instructor Name: Dragomir Radev

Instructor Title: Professor

SIGNATURES ARE REQUIRED FROM ALL DEPARTMENTS INVOLVED

Contact Person: Marsha Antal

Email: mwhitish@umich.edu

Phone: 615.8247

Curriculum Committee: _____ Date: _____

Dept Chair(s): _____ Date: _____
Home Department: *[Signature]*

Cross-Listed Department: *[Signature]* Date: 6/13/14

Cross-Listed Department: *[Signature]* Date: 10/22/14

Cross-Listed Department: _____ Date: _____