

# Essential Studies Program Curriculum Mapping

November 2016

# Purpose of today's session

- To provide tools for programs to use to produce draft curriculum maps incorporating Essential Studies
- This mapping will:
  - Help programs better understand the full model.
  - Allow programs and faculty to make their questions more concrete, helping GEAC to identify sticking points and policies to consider.
  - Help assess impact on transfer students (study which will inform GEAC policies).
  - Help assess impacts on staffing allowing us to prepare for the 2018 incoming class.



# Check your curriculum map

## **Freshman Year - Fall**

WRI 121 - English Composition

MATH 111 - College Algebra

x - Humanities elective

x - Social Science elective

## **Freshman Year - Winter**

WRI 122 - Argumentative Writing

MATH 112 - Trigonometry

EE 121 - Fundamentals of Electric Circuits I

x - Social Science elective

## **Freshman Year - Spring**

SPE 111 - Public Speaking

MATH 251 - Differential Calculus

EE 123 - Fundamentals of Electric Circuits II

x - Humanities elective



# Color-code your curriculum map

## Freshman Year - Fall

WRI 121 - English Composition

MATH 111 - College Algebra

x - Humanities elective

x - Social Science elective

## Freshman Year - Winter

WRI 122 - Argumentative Writing

MATH 112 - Trigonometry

EE 121 - Fundamentals of Electric Circuits I

x - Social Science elective

## Freshman Year - Spring

SPE 111 - Public Speaking

MATH 251 - Differential Calculus

EE 123 - Fundamentals of Electric Circuits II

x - Humanities elective

## Color Codes

- GREEN – Programmatic courses
- BLUE – Specifically required courses
- YELLOW – General education electives

# Step 1: Identify your disciplinary capstone

## Senior Year - Fall

EE 331 - Digital System Design with HDL

ENGR 465 - Capstone Project

CAPSTONE

x - Technical elective \*

x - Social Science elective

## Senior Year - Winter

EE 430 - Linear Systems and Digital Signal Processing

EE 432 - Advanced Digital System Design with HDL

ENGR 465 - Capstone Project

CAPSTONE

x - Humanities elective

## Senior Year - Spring

EE 401 - Communication Systems

ENGR 465 - Capstone Project

CAPSTONE

x - Social Science elective

x - Elective



# Step 2: Identify Program-Integrated Courses

## Junior Year - Winter

EE 323 - Electronics II

EE 333 - Microcontroller Engineering

ENGR 267 - Engineering Programming

Program Integrated Communication (Written)

## Junior Year - Spring

EE 325 - Electronics III

EE 335 - Advanced Microcontroller Engineering

x - Technical elective \*

Program Integrated Communication (Oral), Teamwork

Program Integrated Inquiry & Analysis/Quantitative Literacy

## Junior Year - Summer

SPE 321 - Small Group and Team  
Communication

x - Writing Elective

x - Technical elective \*



## Step 3: Identify Program-Integrated Foundational Ethics

- Identify a course around the first year of your program in which ethics is introduced in the context of your discipline.
- If this isn't currently done explicitly, identify a course where it might be a natural fit.
- If you don't have such a course, PHIL105 or HUM125 can be used for this requirement.

# Step 4: Identify Foundation and Essential Practice Requirements that are met

## Freshman Year - Fall

WRI 121 - English Composition

MATH 111 - College Algebra

x - Humanities elective

x - Social Science elective

**Communication - Foundation - WRI 121**

## Freshman Year - Winter

WRI 122 - Argumentative Writing

MATH 112 - Trigonometry

EE 121 - Fundamentals of Electric Circuits I

x - Social Science elective

**Communication - Foundation - WRI 122**

## Freshman Year - Spring

SPE 111 - Public Speaking

MATH 251 - Differential Calculus

EE 123 - Fundamentals of Electric Circuits II

x - Humanities elective

**Communication - Foundation - SPE111**

## Sophomore Year - Fall

WRI 227 - Technical Report Writing

**Communication - Essential Practice**





# Step 5: Insert Remaining Essential Studies Requirements

## **Freshman Year - Fall**

WRI 121 - English Composition

MATH 111 - College Algebra

(Open Slot)

(Open Slot)

## **Freshman Year - Winter**

WRI 122 - Argumentative Writing

MATH 112 - Trigonometry

EE 121 - Fundamentals of Electric Circuits I

(Open Slot)

## **Freshman Year - Spring**

SPE 111 - Public Speaking

MATH 251 - Differential Calculus

EE 123 - Fundamentals of Electric Circuits II

(Open Slot)



# Insert Unmet Foundation Requirements

## **Freshman Year - Fall**

WRI 121 - English Composition

MATH 111 - College Algebra

Diverse Perspectives – Foundation Elective

Humanities Inquiry – Foundation Elective

## **Freshman Year - Winter**

WRI 122 - Argumentative Writing

MATH 112 - Trigonometry

EE 121 - Fundamentals of Electric Circuits I

Social Sciences Inquiry – Foundation Elective

## **Freshman Year - Spring**

SPE 111 - Public Speaking

MATH 251 - Differential Calculus

EE 123 - Fundamentals of Electric Circuits II

Ethical Reasoning – Foundation Elective

# Insert the Synthesis Experience

## Junior Year - Winter

EE 323 - Electronics II

EE 333 - Microcontroller Engineering

ENGR 267 - Engineering Programming

Program Integrated Communication (Written)

## Junior Year - Spring

EE 325 - Electronics III

EE 335 - Advanced Microcontroller Engineering

x - Technical elective \*

Program Integrated Communication (Oral), Teamwork

Program Integrated Inquiry & Analysis/Quantitative Literacy

## Junior Year - Summer

SPE 321 - Small Group and Team

Communication

Essential Studies Synthesis Experience (ESSE)

x - Technical elective \*

**Teamwork - Foundation**



# Insert Unmet Essential Practice (15 credits)

## Junior Year - Summer

SPE 321 - Small Group and Team Communication	<b>Teamwork - Foundation</b>
Essential Studies Synthesis Experience	
x - Technical elective *	

## Senior Year - Fall

EE 331 - Digital System Design with HDL	CAPSTONE
ENGR 465 - Capstone Project	
x - Technical elective *	
Essential Practice	

## Senior Year - Winter

EE 430 - Linear Systems and Digital Signal Processing	CAPSTONE
EE 432 - Advanced Digital System Design with HDL	
ENGR 465 - Capstone Project	
Essential Practice	

## Senior Year - Spring

EE 401 - Communication Systems	Program-Integrated Ethical Reasoning, PI Diverse Perspectives
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# We Want Your Input

- Are there courses you were expecting on lists (which we might explore adding)?
- Are there opportunities for “re-arranging” Essential Studies requirements in your map to form progressions that better support your program-integrated and capstone work?
- Are there opportunities for efficiencies that you see might be possible?
- Do you have other concerns, thoughts, or input on the model or mapping process?



# Submit

## December 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24