



## Workshop for New and Prospective VIP Programs

### **Julie Sonnenberg-Klein**

Full Team by Seniority:

Ed Coyle, Director

Chris Malbrue, Academic Prog Manager

Leah Misemer, Assistant Director

Deon O'Bryant, Assistant Director

Mitsuko Ito, Academic Program Coord.

# Introductions



Name & Institution



Want to Learn or Take Away  
(Today or This Week)

# Quick Overview

- Why VIP **\*\*brief\*\***
- VIP Model
- Key Elements
- Program Start-up

# Why VIP?

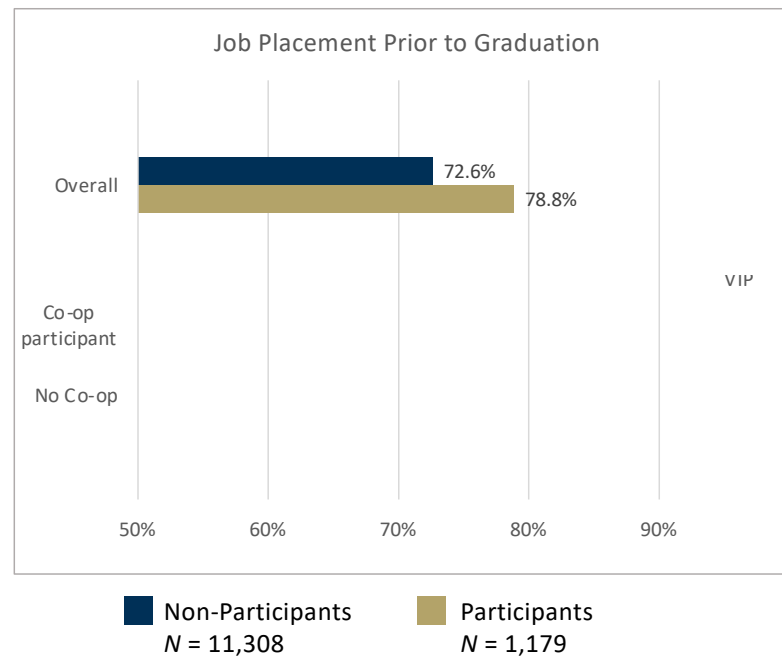
## Gains in:

- Job placement
- Leadership
- Professional skills
  - Ability to work with people from other backgrounds
  - Ability to work in multidisciplinary teams
  - Understanding of technology related to field



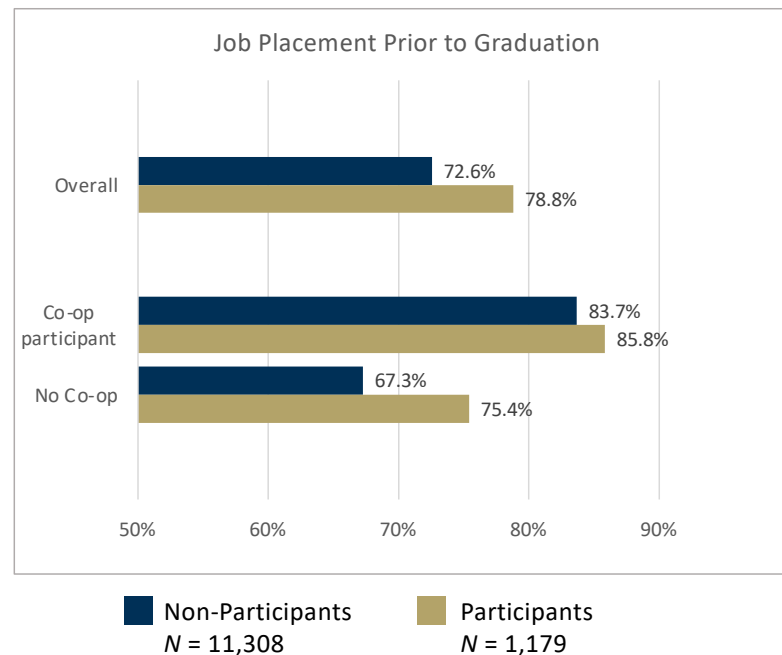
# Most Compelling Findings: Job Placement

- Participants
  - **6% higher**



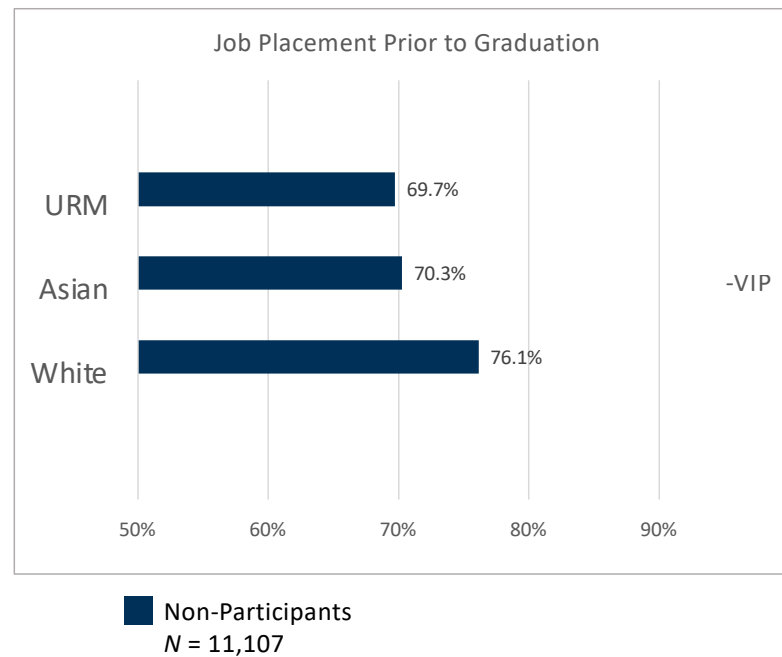
# Most Compelling Findings: Job Placement

- Participants
  - **6% higher**
- Co-Op Students
  - Not significant
- Non Co-Op Students
  - **8% higher**  
among participants



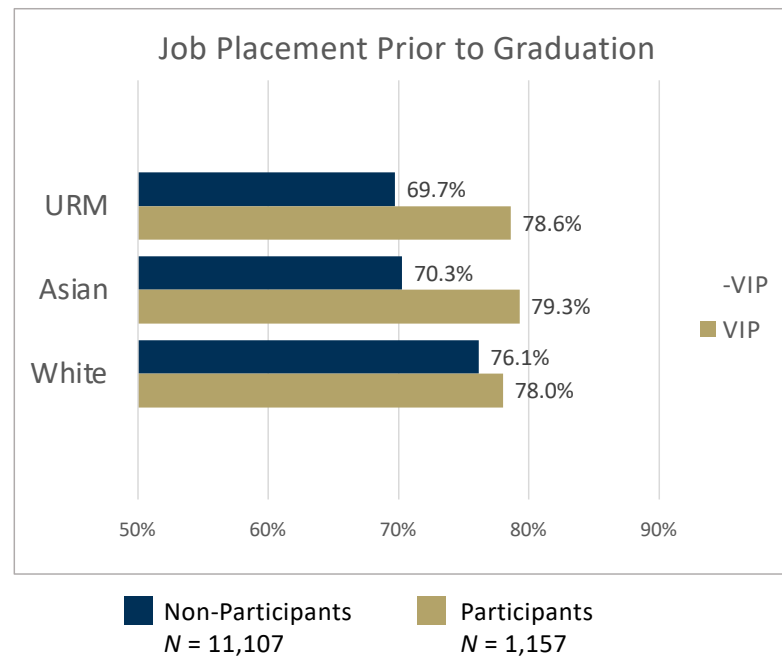
# Inequity among Non-Participants

- White Students
  - **6% higher**



# Equity among Participants

- Under-represented minority students
  - **9% higher** for participants
- Asian students
  - **9% higher** for participants
- White students
  - not significant





# VIP: A Simple Model



**Faculty embed  
large student teams  
in their research**

10-20+ students/team

Vertically integrated teams

Last many years

# VIP: A Simple Model



**Faculty embed  
large student teams  
in their research**

10-20+ students/team

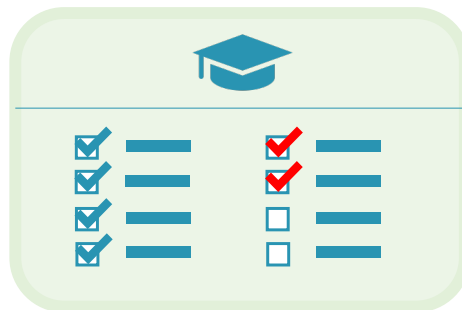
Vertically integrated teams

Last many years

## Curricular

1-2 credits/semester

Letter grades



# VIP: A Simple Model



## Faculty embed large student teams in their research

10-20+ students/team

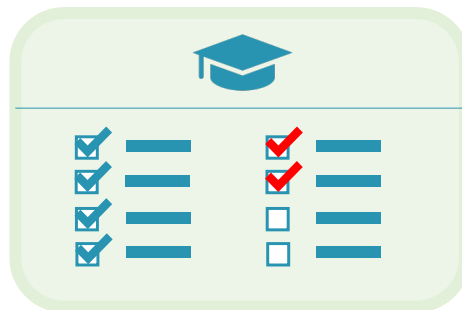
Vertically integrated teams

Last many years

## Curricular

1-2 credits/semester

Letter grades



## Students can participate multiple semesters

Returning students:

- Mentor new students
- Lead subteams

# VIP: A Simple Model



## Faculty embed large student teams in their research

10-20+ students/team

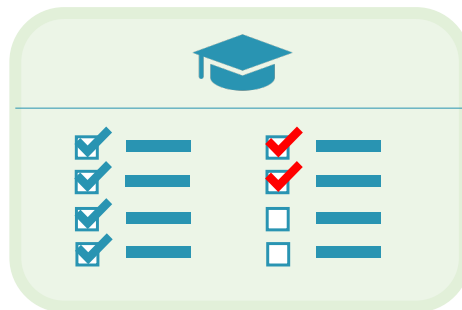
Vertically integrated teams

Last many years

## Curricular

1-2 credits/semester

Letter grades



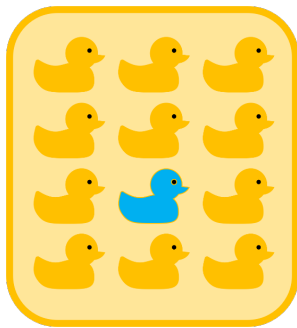
## Students can participate multiple semesters

Returning students:

- Mentor new students
- Lead subteams

Team Listings: <https://www.vip.gatech.edu/teams>

# VIP Often Requires Change



## Cultural

Who gets to do  
undergraduate research?



## Curricular

Undergraduate research  
Electives  
Required sequences



## Organizational

Egos, Territory  
Credits for courses  
from other depts  
Faculty course release time



## Discussion: Undergraduate Research

How does undergraduate research work at your institution? Who participates? How?



## Key Elements of VIP

# 8 Key Elements



2014

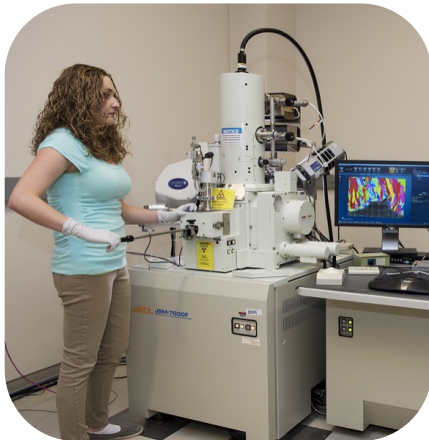


2022





# Projects



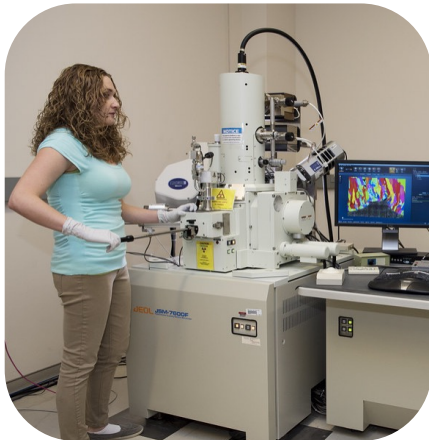
## **#1 Embedded in faculty mentor's research**

*Scholarship  
& Exploration*



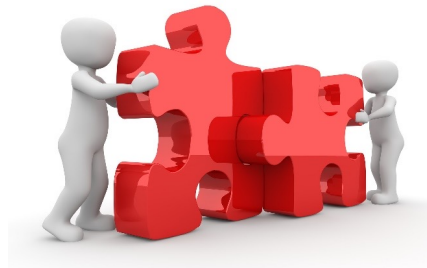


# Projects



## #1 Embedded in faculty mentor's research

*Scholarship  
& Exploration*



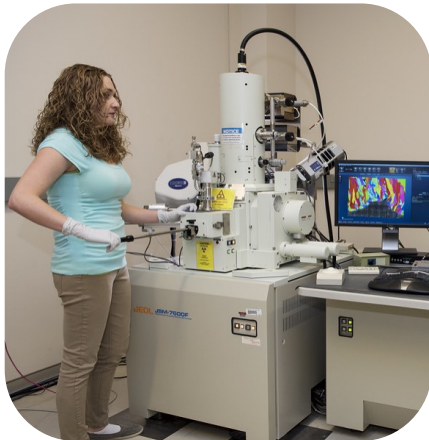
## #2 Large-scale & long-term

*Many years*

*Evolves with  
Instructor's Research*

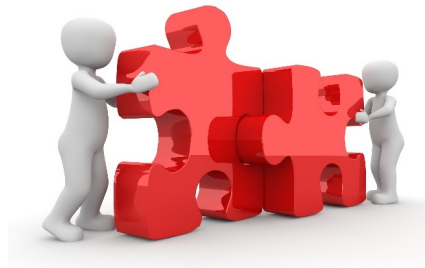


# Projects



**#1 Embedded in  
faculty mentor's  
research**

*Scholarship  
& Exploration*



**#2 Large-scale  
& long-term**

*Many years  
Evolves with  
Instructor's Research*



**3. Multidisciplinary  
teams encouraged  
but not required**



# Course

**#4**

**Academic credit  
Letter grades**

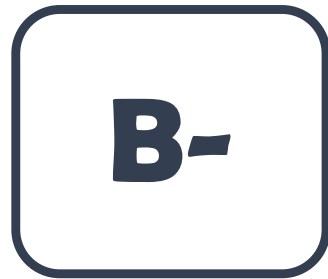




# Course

#4

Academic credit  
Letter grades



#5

Can earn credits  
toward degree for  
**at least two years**

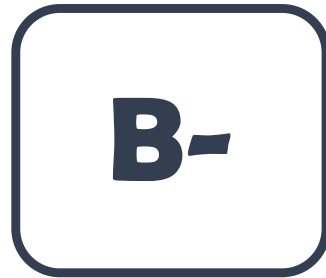
1-2 credits/semester



## Course

**#4**

**Academic credit  
Letter grades**



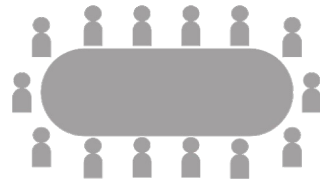
**#5**

**Can earn credits  
toward degree for  
at least two years**

1-2 credits/semester

**#6**

**Dedicated classroom  
& meeting spaces**

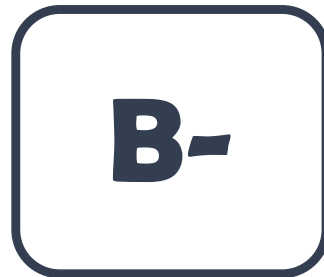




## Course

**#4**

**Academic credit  
Letter grades**



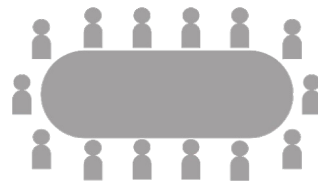
**#5**

Can earn credits  
toward degree for  
**at least two years**

1-2 credits/semester

**#6**

**Dedicated classroom  
& meeting spaces**



**#7**

Development of  
**disciplinary and  
professional skills**



# Participation

#8

Faculty/student participation is based on **mutual interest**





# Establishing a VIP Program



1. Instructors
2. Course Framework/Grading
3. Champions & Supporters
4. Create or Repurpose Courses
5. Policies on How Credits Count
6. Students

**Tackle in any order**

# 1. Instructors

## Models for Teaching Credit/Release Time

- No release time
  - Advances faculty research
  - Not an option at institutions with heavy teaching loads
- 1 course per academic year for:
  - Forever
  - First 2 years
  - First 2 years + Capstone-like credit beyond (**scalable**)
- VIP Director
  - Lighter teaching loads: 1 course per year
  - Heavy teaching loads: 1 course per semester

When Faculty  
Benefit,  
Stay Engaged



# Selling Points

Large-scale projects



Access to  
Other Majors



Low Risk Setting

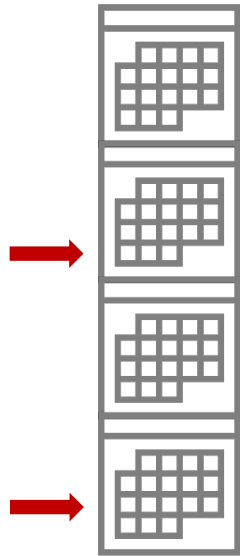


Broader Impacts

# Recruiting Instructors

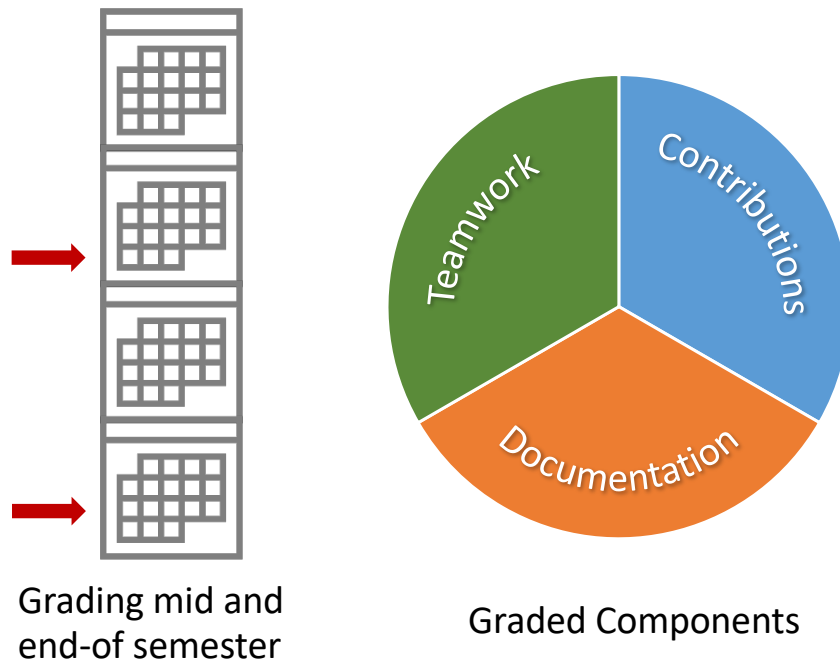
- **Voluntary**
- Low Hanging Fruit
  - Already working with undergrads
  - Need students from other majors
- Team information sheet (goals, methods, majors, etc.)
  - 3 or more years
  - General enough to last multiple years
  - Boring details later

## 2. Course Framework/Grading

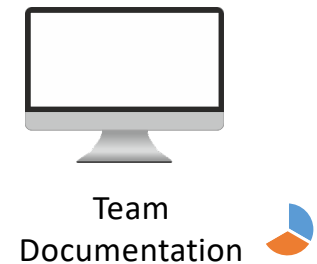
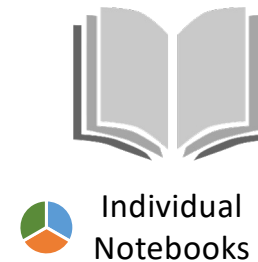
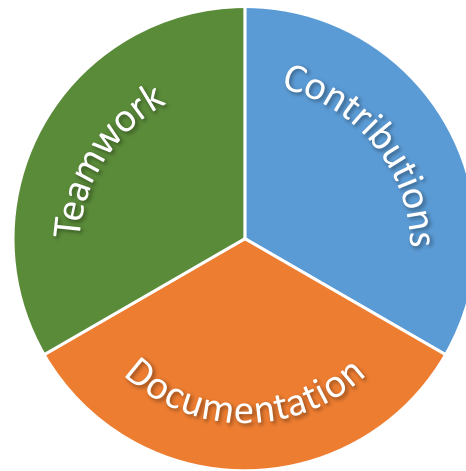
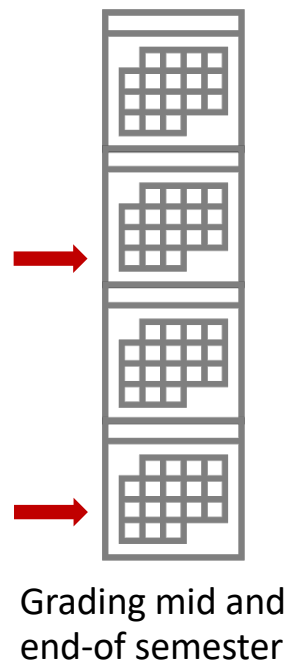


Grading mid and  
end-of semester

## 2. Course Framework/Grading



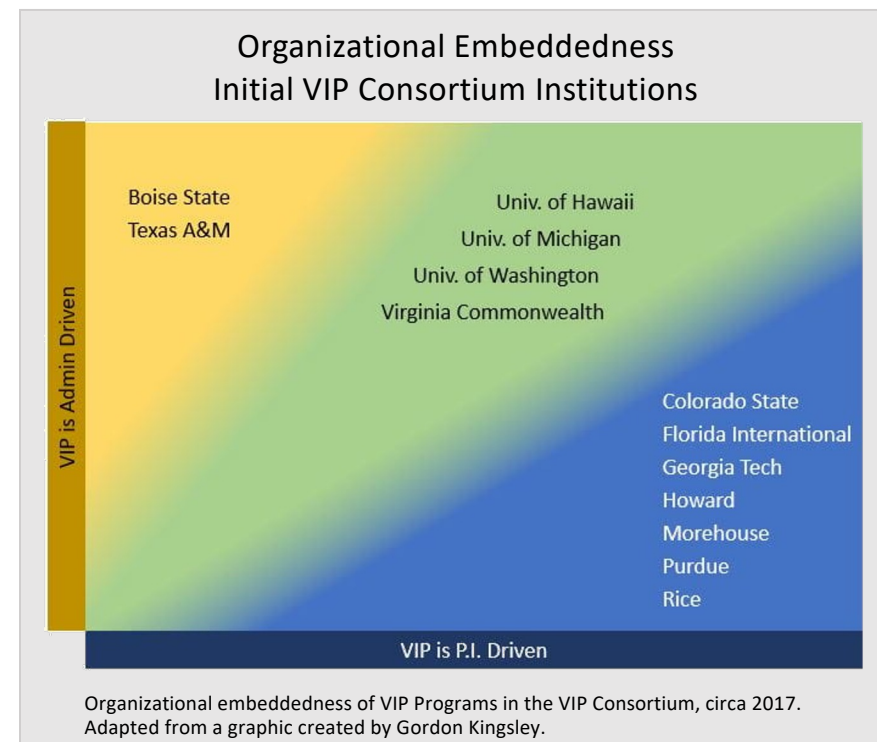
## 2. Course Framework/Grading





## 3. Champions & Supporters

- Top-down or grass-roots
- Cultivate Supporters
  - Administrators
  - Curriculum committee members
  - Registrar
  - Staff





## Discussion: Low-Hanging Fruit

Who might be a good **instructor** or **champion/supporter**?

If you've already started a program, **what has worked well**?

Where do you **want/need to grow**?

## 3. Create or Repurpose Courses

- Final goal: Campus-wide subject code (VIP, etc.)
  - Don't have to start from scratch
- Short-term:
  - Temporary course numbers
  - Repurpose existing courses
- No right/wrong timeline
  - Can promote the program without emphasizing course number
  - More recent programs fast!

American University of Beirut  
Lebanese American University

Georgia College  
Georgia Southern

# Notes & Suggestions

- Don't cross-list!
  - 1 team: 12 course numbers
  - If Cross-list to 5 departments: 60 courses, 240 cross-listings
- How instructors see courses:
  - One meeting time
  - Students in multiple course numbers
  - Same section number across the courses
- If class size regulated (small classes canceled), administration will need to understand the structure

# Structure

- Levels
- Each can be taken multiple times

Level	Course	Credits	Sections	
			Team 1	Team 2
Soph	VIP 2601	1	VP1	VP2
Junior	VIP 3601	1	VP1	VP2
	VIP 3602	2	VP1	VP2
Senior	VIP 4601	1	VP1	VP2
	VIP 4602	2	VP1	VP2
	Capstone	Vary	VP1	VP2
Graduate	VIP 6601	1	VP1	VP2
	VIP 6602	2	VP1	VP2
	VIP 6603	3	VP1	VP2

# Structure

- Levels
- Each can be taken multiple times
- Teams identified by section number
  - VP1, Team 1 (forever)
  - VP2, Team 2 (forever)

Level	Course	Credits	Sections	
			Team 1	Team 2
Soph	VIP 2601	1	VP1	VP2
Junior	VIP 3601	1	VP1	VP2
	VIP 3602	2	VP1	VP2
Senior	VIP 4601	1	VP1	VP2
	VIP 4602	2	VP1	VP2
	Capstone	Vary	VP1	VP2
Graduate	VIP 6601	1	VP1	VP2
	VIP 6602	2	VP1	VP2
	VIP 6603	3	VP1	VP2

# Structure

- Levels
- Each can be taken multiple times
- Teams identified by section number
  - VP1, Team 1 (forever)
  - VP2, Team 2 (forever)
- Credits
  - Goal: At least 2 years

Level	Course	Credits	Sections	
			Team 1	Team 2
Soph	VIP 2601	1	VP1	VP2
Junior	VIP 3601	1	VP1	VP2
	VIP 3602	2	VP1	VP2
Senior	VIP 4601	1	VP1	VP2
	VIP 4602	2	VP1	VP2
	Capstone	Vary	VP1	VP2
Graduate	VIP 6601	1	VP1	VP2
	VIP 6602	2	VP1	VP2
	VIP 6603	3	VP1	VP2

# Structure

- Levels
- Each can be taken multiple times
- Teams identified by section number
  - VP1, Team 1 (forever)
  - VP2, Team 2 (forever)
- Credits
  - Goal: At least 2 years
  - 0 credit/audit for pay

Level	Course	Credits	Sections	
			Team 1	Team 2
Soph	VIP 2601	1	VP1	VP2
	VIP 2600	Pay	VP1	VP2
Junior	VIP 3601	1	VP1	VP2
	VIP 3602	2	VP1	VP2
	VIP 3600	Pay	VP1	VP2
Senior	VIP 4601	1	VP1	VP2
	VIP 4602	2	VP1	VP2
	Capstone	Vary	VP1	VP2
	VIP 4600	Pay	VP1	VP2
Graduate	VIP 6601	1	VP1	VP2
	VIP 6602	2	VP1	VP2
	VIP 6603	3	VP1	VP2
	VIP 6600	Pay	VP1	VP2

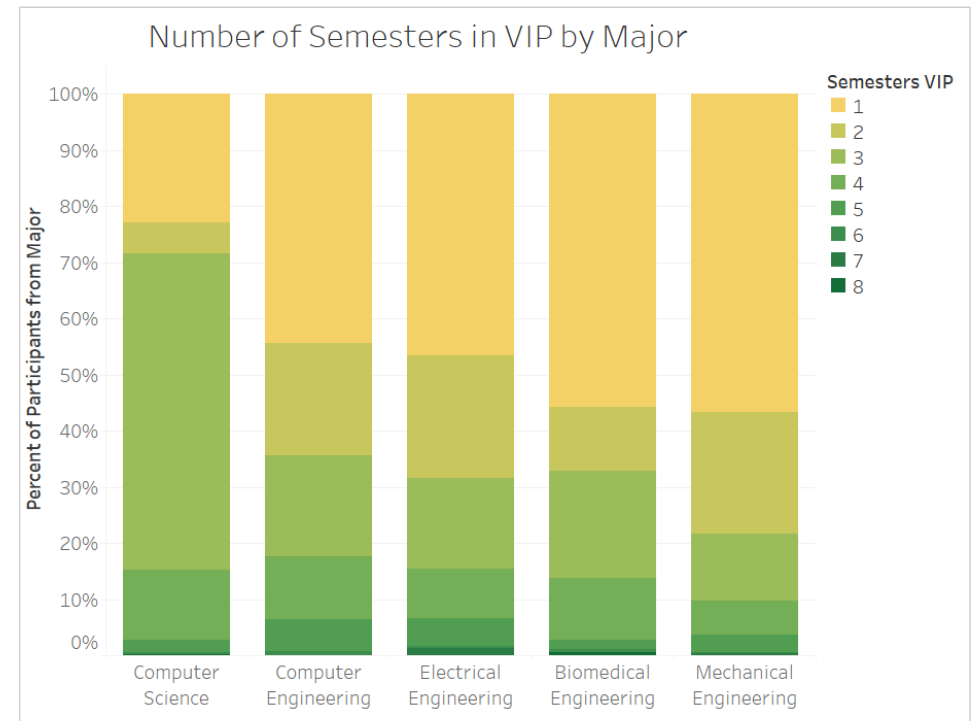


# Lessons Learned

- Don't cross-list!
  - 1 team: 12 course numbers
  - If Cross-list to 5 departments: 60 courses, 240 cross-listings
- How instructors see courses:
  - Students in multiple course numbers
  - Same meeting time
  - Same section number
- Registrars:
  - If small classes are problems/canceled – communicate in advance
  - 1 and 2 (and 3) credits with only 1hr meeting time: unsupervised lab

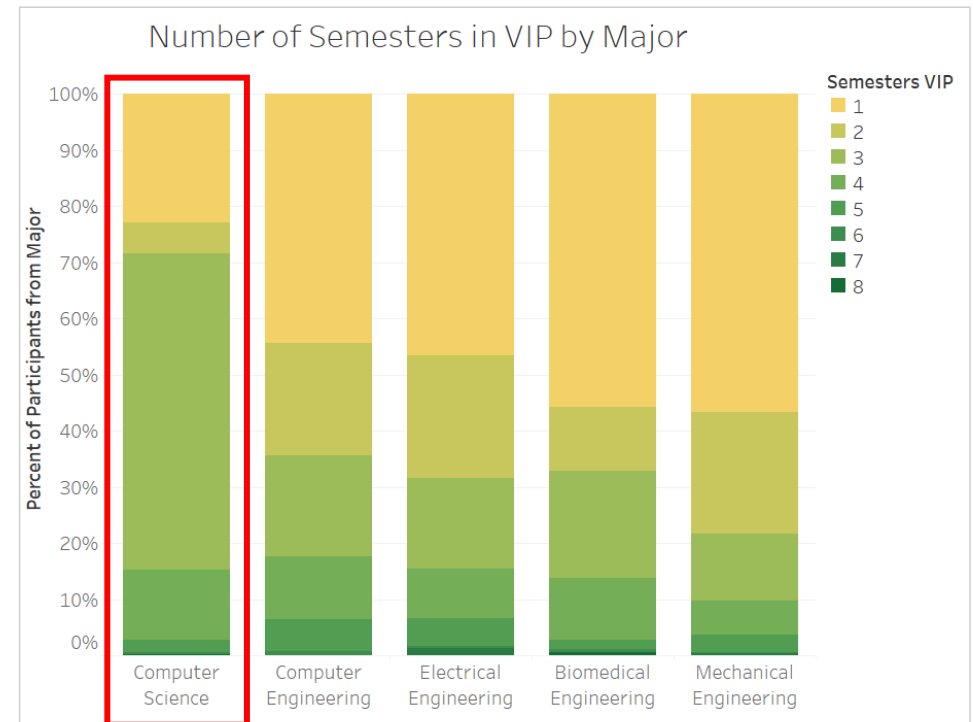
## 5. Policies on How Credits Count

- Goals
  1. Space for 2 years of VIP
  2. Incentivize multiple semesters



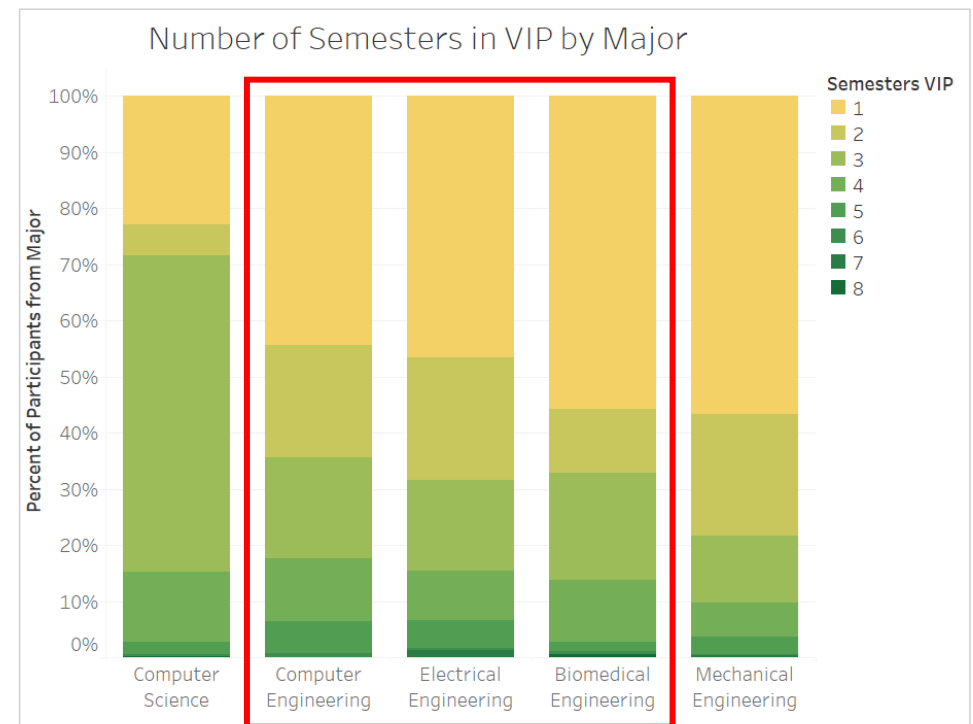
## 5. Policies on How Credits Count

- Goals
  1. Space for 2 years of VIP
  2. Incentivize multiple semesters
- Multi-semester design sequence



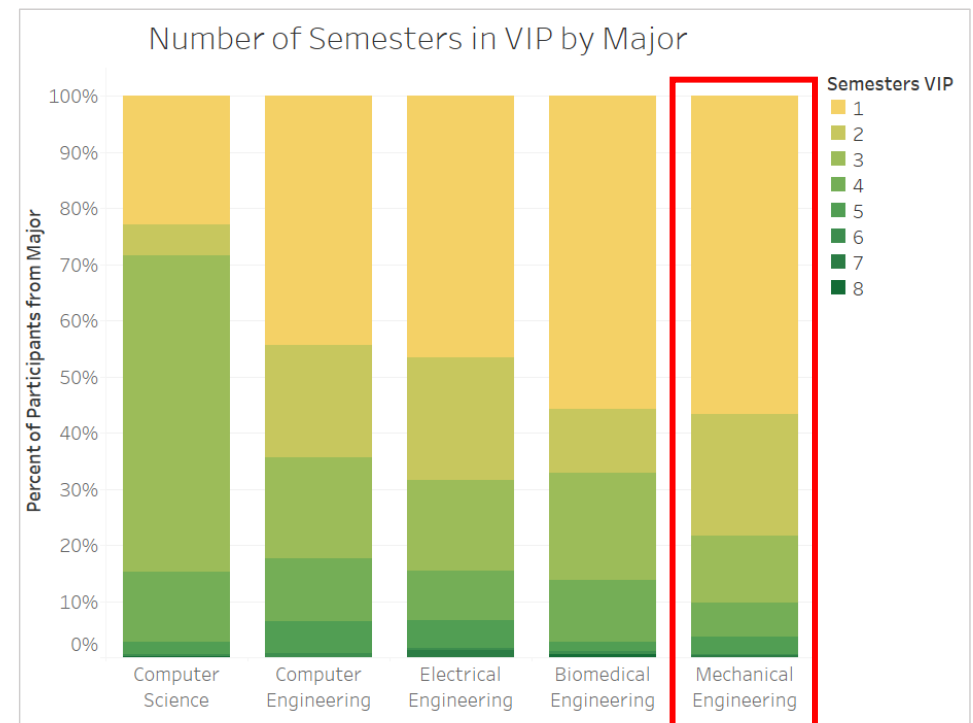
## 5. Policies on How Credits Count

- Goals
  1. Space for 2 years of VIP
  2. Incentivize multiple semesters
- Multi-semester design sequence
  - Threshold policy



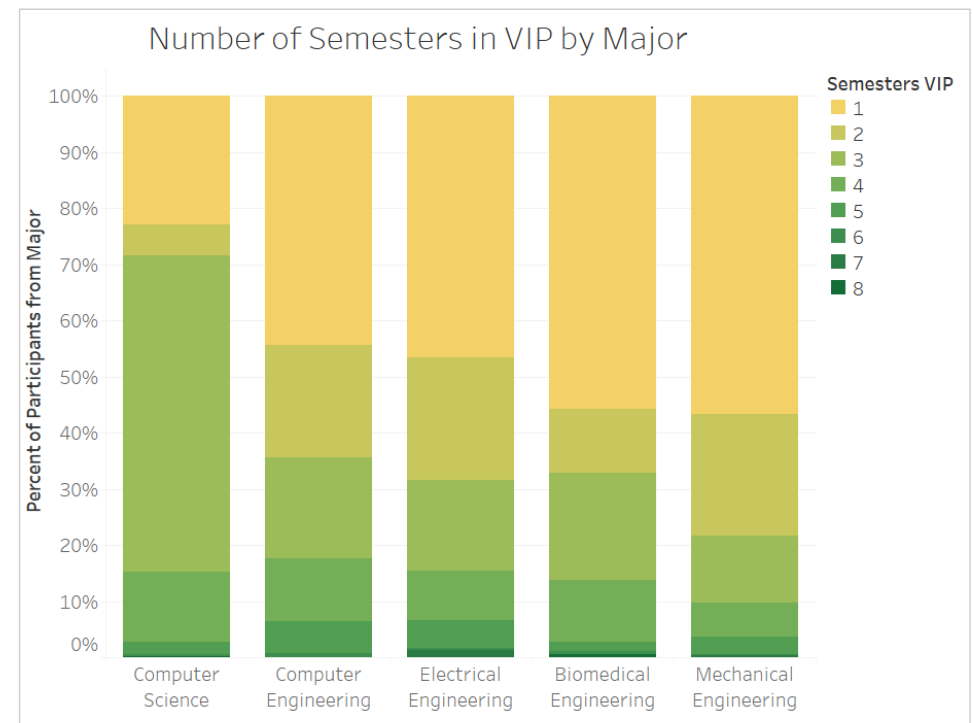
## 5. Policies on How Credits Count

- Goals
  1. Space for 2 years of VIP
  2. Incentivize multiple semesters
- Multi-semester design sequence
- Threshold policy
  - Free elective



## 5. Policies on How Credits Count

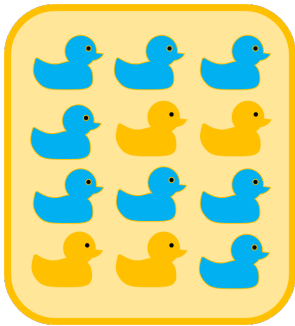
- Goals
  1. Space for 2 years of VIP
  2. Incentivize multiple semesters
- Multi-semester design sequence
- Threshold policy
- Free elective
- Pretoria model:
  - Fulfills required work experience



## 6. Students

- A. Selection
- B. Selecting
- C. Enrollment Management

# Student Selection



- Different majors
- Academic ranks
- Enthusiasm, not experience
  - No GPA, resumes, recommendations
- Paradigm shift
  - Instructors vs. Directors



# Student Recruiting

- Low stress application
  - Name, Rank, Team, Credit hours
  - 250 characters on motivation
- Proactive: Webpage, email campaigns, rolling admissions
  - Before or at beginning of registration

Increases  
Access



# Enrollment Management

- Needs:
  - Save room for returning students
  - Manage team composition
- Challenge with open enrollment
- Registration permits



# Establishing a VIP Program



1. Instructors
2. Champions & Supporters
3. Create or Repurpose Courses
4. Course Framework/Grading
5. Policies on How Credits Count
6. Students

**Tackle in any order**



# Discussion