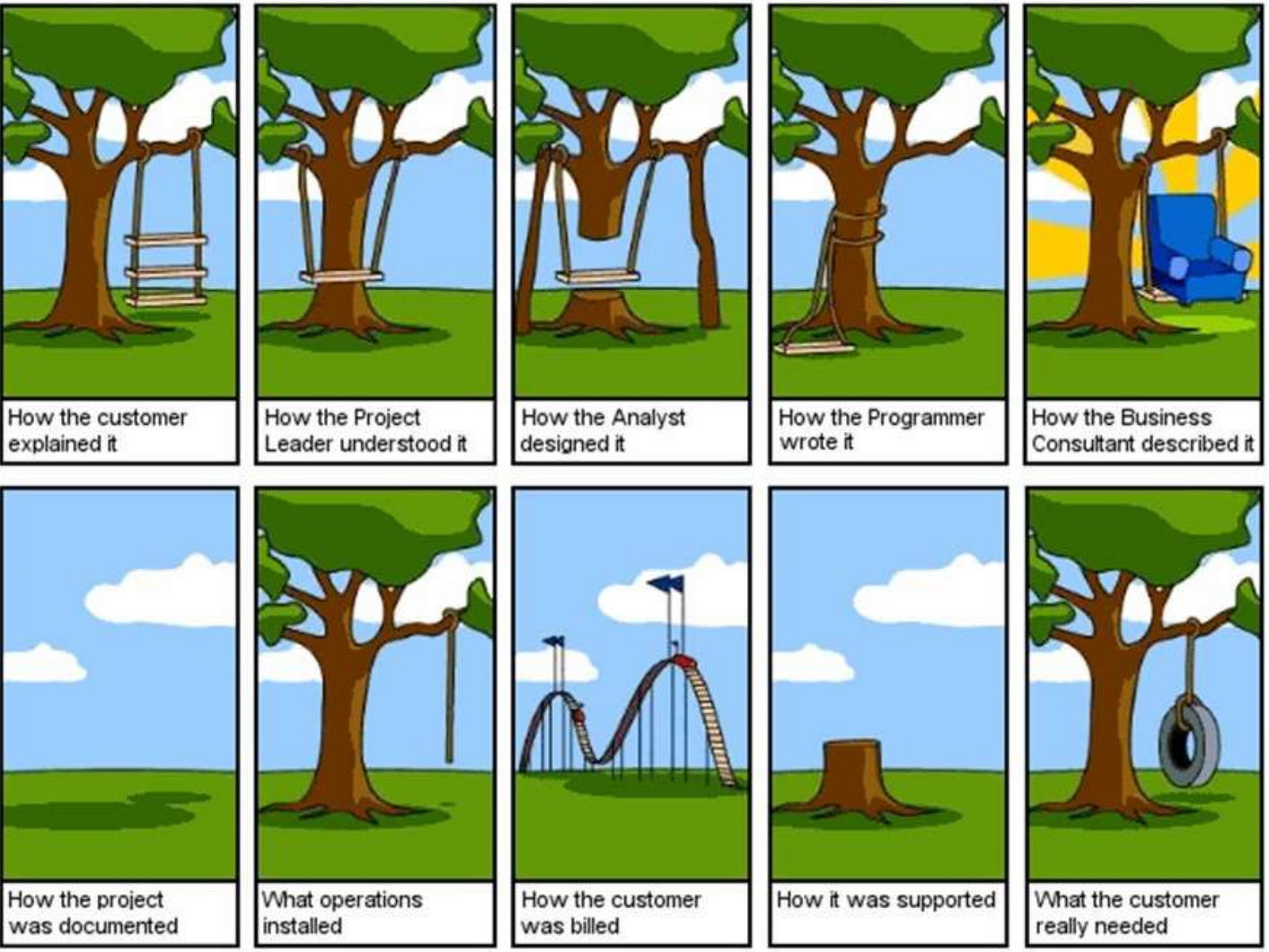


Welcome to Software Engineering!

Academic Day

August 2025

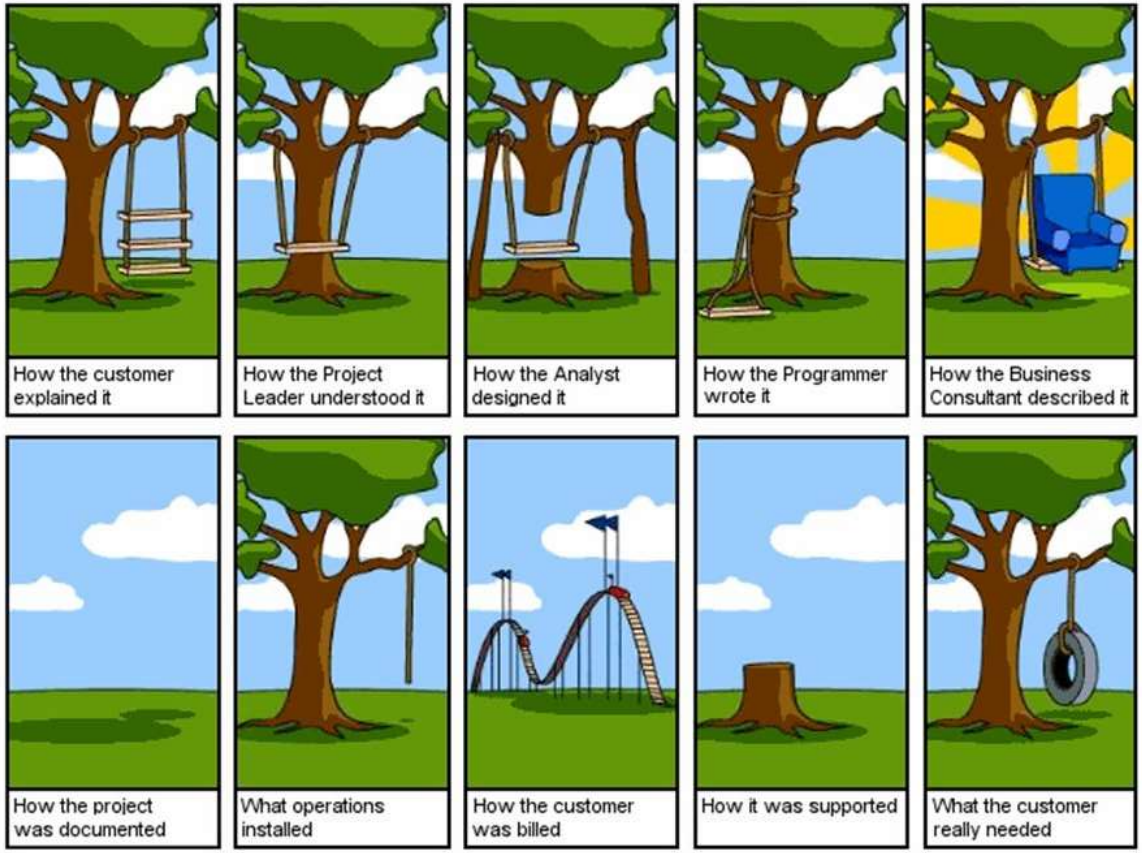
Today's Agenda

- Software Engineering Program Overview
  - What did I sign up for?? What is SE?
  - Who are we?
  - Your (curricular) future
  - Unsolicited wisdom
- SE Advising
  - Video from University Advising Office
  - Advising Support
  - Understanding your Fall schedule
- Society of Software Engineering (SSE)
  - Presentation
  - Activity!
- Lunch
- Optional - Enrollment Bootcamp + advising questions

What is SE?

"I'll never understand what you do,
but I'm glad you love it"
-Grandma

~~If~~ When someone asks you "What is Software Engineering?",
what will you tell them?


How the customer explained it
How the Project Leader understood it
How the Analyst designed it
How the Programmer wrote it
How the Business Consultant described it
How the project was documented
What operations installed
How the customer was billed
How it was supported
What the customer really needed

What is SE?

"I'll never understand what you do,
but I'm glad you love it"
-Grandma

~~If~~ When someone asks you "What is Software Engineering?", what will you tell them?

"I study how to make software."

"I study how to make software on time, on budget, and no bugs"

"I'm learning the practices and principles of the software development lifecycle"

"I study four things with software: define, design, develop, deliver."

"I do things with computers."

Important People

Department Chair
Dr. Daqing Hou

Office Manager
Marie Barreto Merritt

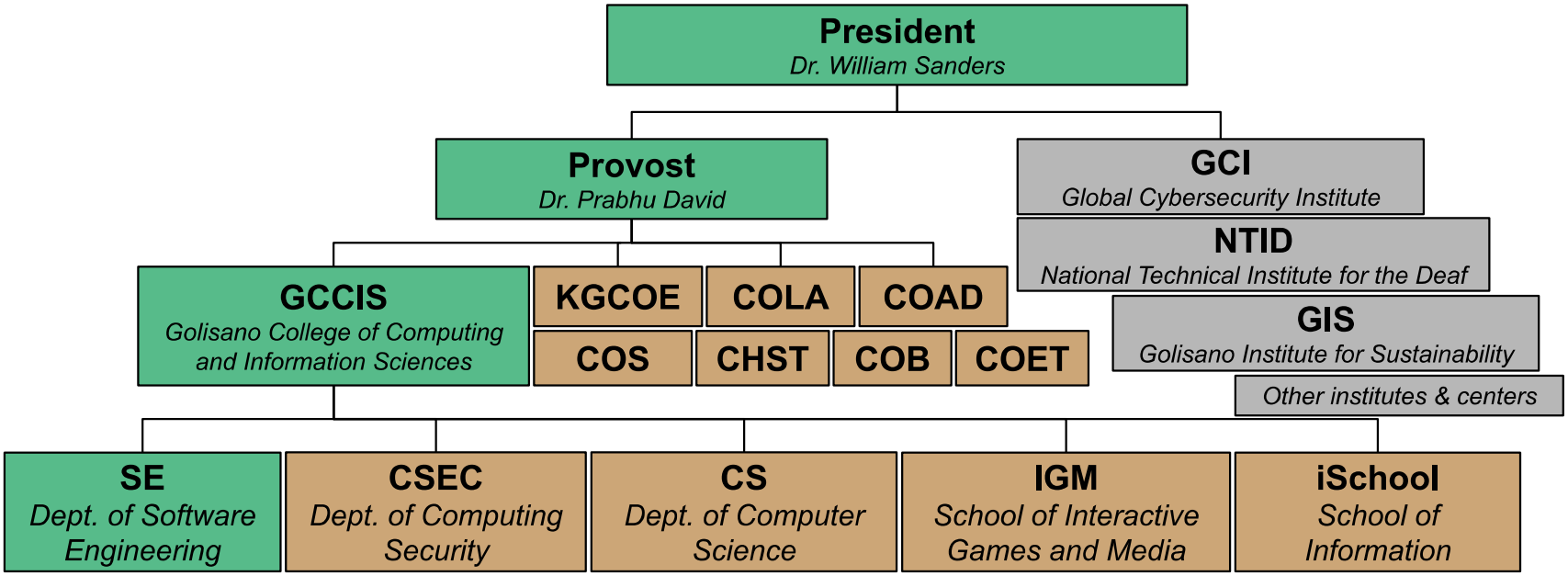
Sr. Staff Specialist
Denise Stade

Staff Assistant
Lauren McQueen

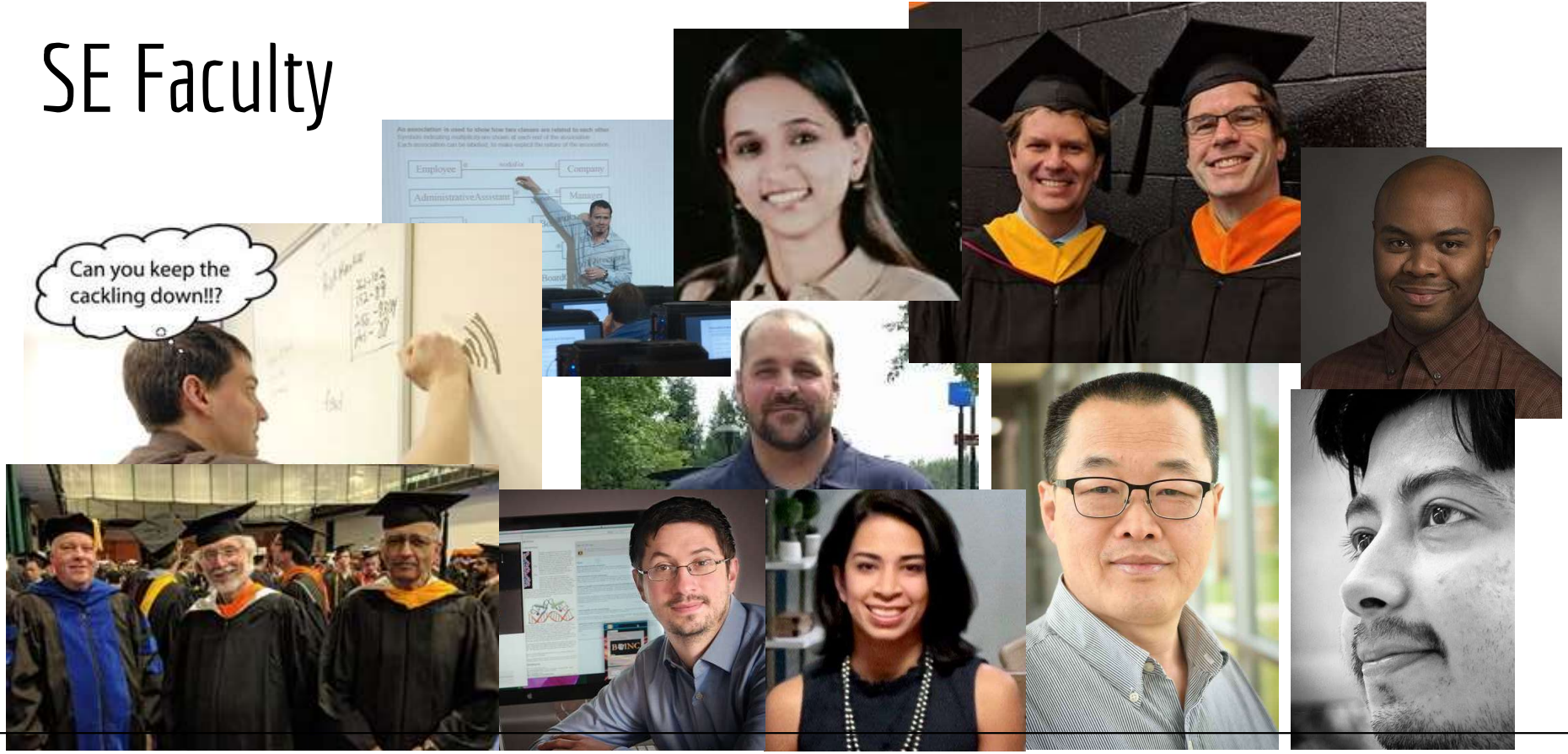
Undergrad Program Coordinator
Dr. Andy Meneely

UG Academic Advisors
Carrie Koneski
Sarah Mittiga
Joe Rozak

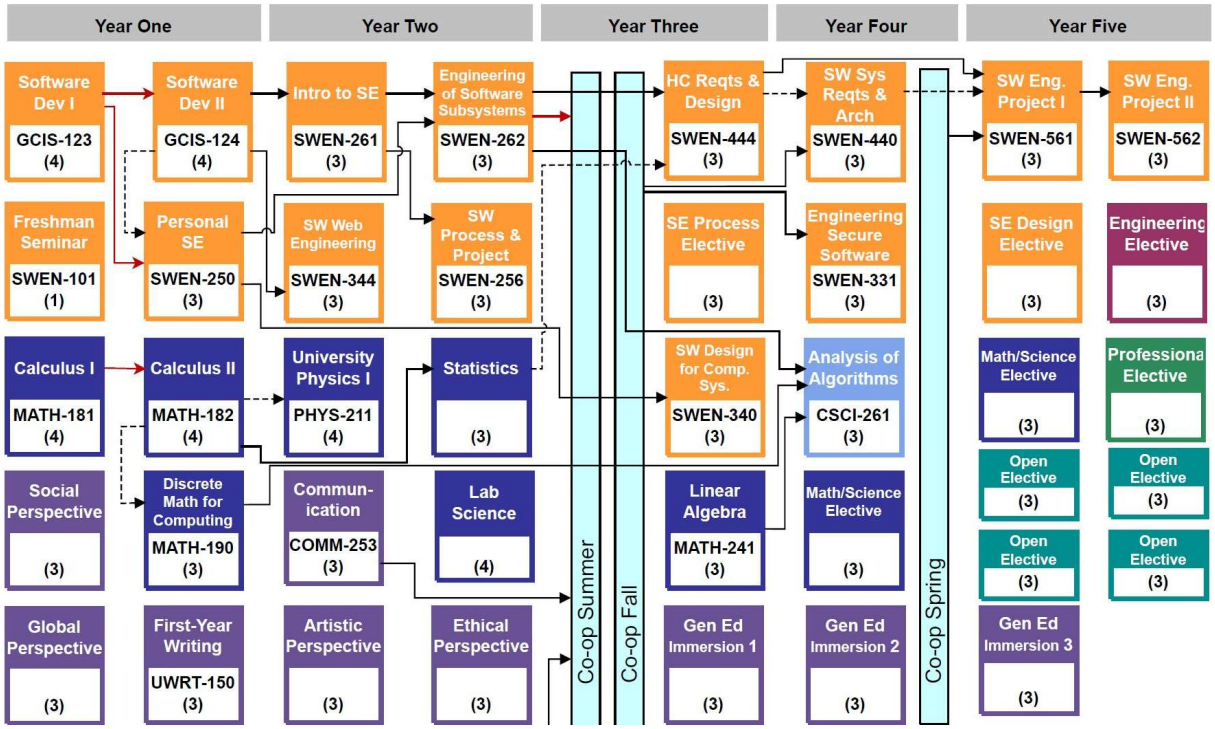
RIT Organization



SE Faculty


Can you keep the cackling down!!?
Employee
Company
AdministrativeAssistant
Manager

The Flowchart



The 3 Eras

Pre Co-op Era

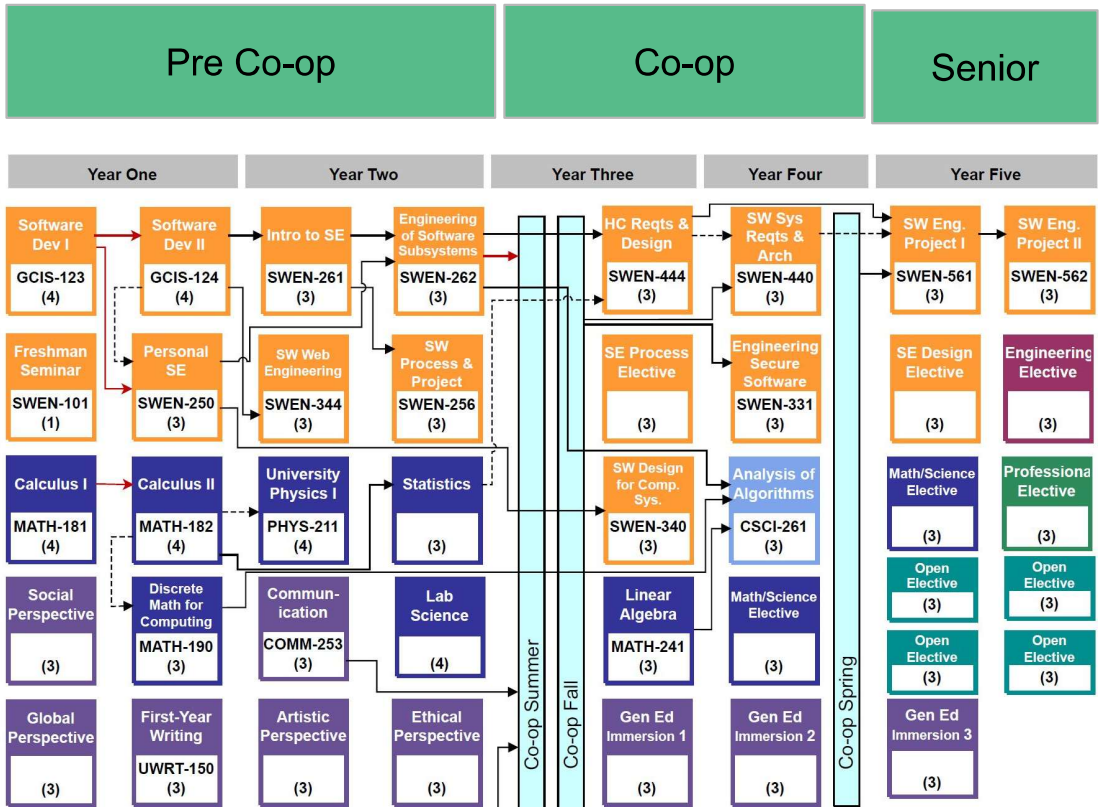
- Foundational courses
- C- or better on SWEN-262

Co-op Era

- Upper class courses
- Electives
- Co-op: 2 semesters, 1 summer

Senior Era

- Co-op completed
- Senior project
- Electives



SE == Making Things

GCIS-123/4 Software Development I/II	*Make **small** things*
SWEN-250 Personal SE	*Make things **pragmatically***
SWEN-261 Intro to SE	*Make a thing **with people***
SWEN-262 Eng. of Software Subsystems	***Design** things to be made*
SWEN-256 SW Process & Project Management	***Organize** people to make things*
SWEN-344 Web Engineering	*Make **full-stack** things*
Co-op	***Practice** making things*
SWEN-331 Engineering Secure Software	***Defend** the things you make*
SWEN-440 SW Requirements & Architectures	*Make **big** things*
SWEN-444 Human-Centered Requirements & Design	*Make things for **humans***
SWEN-340 SW Design for Computing Systems	*How things **really work***
SWEN-561/2 SW Engineering Project I/II	*Do **all** the things*

Unsolicited Wisdom

Software Development vs. Programming

"I have been programming since I was 1 month old,
why do I need this course??"

- Great! Then GCIS-123 or GCIS-127 might be easy...

  ...but...

- syntax != software development
- Software development is a ***practice*** that needs ***honing***

  (marathon runners don't say "I already know how to run!")
- Coding as a hobby does NOT emphasize:
  - Writing **maintainable** code
  - Working under **tight deadlines**
  - **Finishing**.

Computers are Isolating

- Few people *in the world* will understand what you do
  - Computers are relentlessly, stupidly precise
  - You're still learning technical communication
- You *will* feel isolated
  - "I'm the only one struggling with this" — People are good at faking.
  - "Everyone else knows what to do except me" — You'd be surprised…
  - "Real programmers wouldn't have to google this" — Looking stuff up is not weakness
- What do you do?
  - Step back.
  - Rubber ducky debugging (explain to someone…anyone)
  - Talk to teammates
  - Talk to Course Assistant (CAs)
  - Visit Society of Software Engineers (SSE)
  - Talk to Academic Advisors
  - Talk to your instructor, other SE Faculty
  - Use CaPS (rit.edu/counseling)

The Best Software Engineers are...

- Imperfect
  - Less about **avoiding** making mistakes
  - More about **recovering** from mistakes made
- Tenacious troubleshooters
- Persevering
- Dependable colleagues
- Disciplined
  - Always thinking about their thinking
  - Always checking their work
  - Practical mindset, from... practice

Notice how I did NOT say:

- *Smart*
- *Loud*
- *Competitive*
- *Extraverted*
- *Best grades*
- *Proud*
- *Friends*
- *Leader*
- *Starting coding at the age of 2 or whatever*
- *Any gender, race, background, etc.*

4 more tips

1. Read the syllabus.
2. Read the syllabus.
3. Read your emails, Slack, Discord, etc.
4. Read the syllabus.

Getting connected

FirstByte

A first-year experience program

- FirstByte is a first year experience program designed to build a culture of inclusivity in the college, while introducing students to resources and skills to help their success at RIT.
- We'll have activities, events, and communications where you can connect with student clubs, key resources and more.

FirstByte Carnival: Thursday, August 22 2:30pm – 4:30pm

- In and around Golisano Hall & Cybersecurity wing
- Featuring many student clubs
- Games and prizes, carnival concessions, DIY crafts, bounce house, and more!

- And join our FirstByte Discord Community! The College of Computing FirstByte Server is a digital space for first-year students in college programs to meet classmates, stay updated on college happenings, find resources and connect

Academic Advising at RIT

https://vimeo.com/1111052244?share=copy#t=0

Academic Advisors in SE

Carrie Koneski A-G	**Sarah Mittiga** H-L	**Joe Rozak** M-Z

Advising Roles

Your **advisor's** responsibilities

- Help with schedule & course plan
- Provide guidance to help you make informed decisions
- Help you focus toward your goals
- Be knowledgeable about campus resources
- Be accessible

Your responsibilities

- Be aware of the program's requirements
- **Be proactive** – know when to ask for help
- Take responsibility for your actions & your education

J

FERPA Confidentiality Law

- Federal restrictions on information shared about your academic record

- Advisors need <u>your permission</u> to discuss your record with your parents

J

How do I contact my advisor?

- Email
- Open Advising Hours
- Appointments

J

How do I contact my advisor?

- Email - check **RIT email** daily!
- Open Advising Hours
- Appointments

1-3 business days

J

How do I contact my advisor?

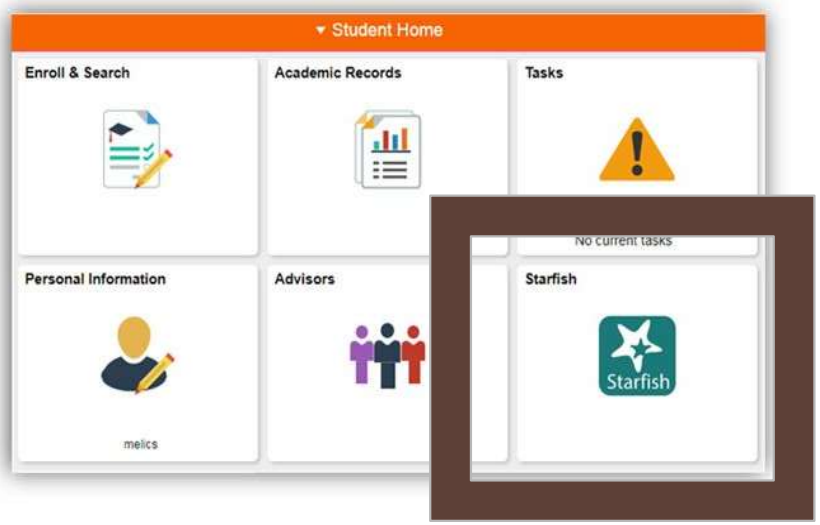
- Email
- **Open Advising Hours -** Walk-ins for quick questions
- Appointments

Check the Google Sheet for our hours!

	Monday	Tuesday	Wednesday	Thursday	Friday
Carrie	*Zoom only*	*Zoom only*		*Zoom only*	*Zoom only*
	10:30-11:30am	10:30-11:30am	~	10:30-11:30am	10:30-11:30am
Sarah		*Zoom or In Person*			*Zoom or In Person*
	~	10:30-11:30am	~	~	10:30-11:30am
Joe			*Zoom or In Person*	*Zoom or In Person*	*Zoom or In Person*
	~	~	10:00-11:00am	10:00-11:00am	10:00-11:00am

How do I contact my advisor?

- Email
- Open Advising Hours
- **Appointments:**
  - Schedule through Starfish

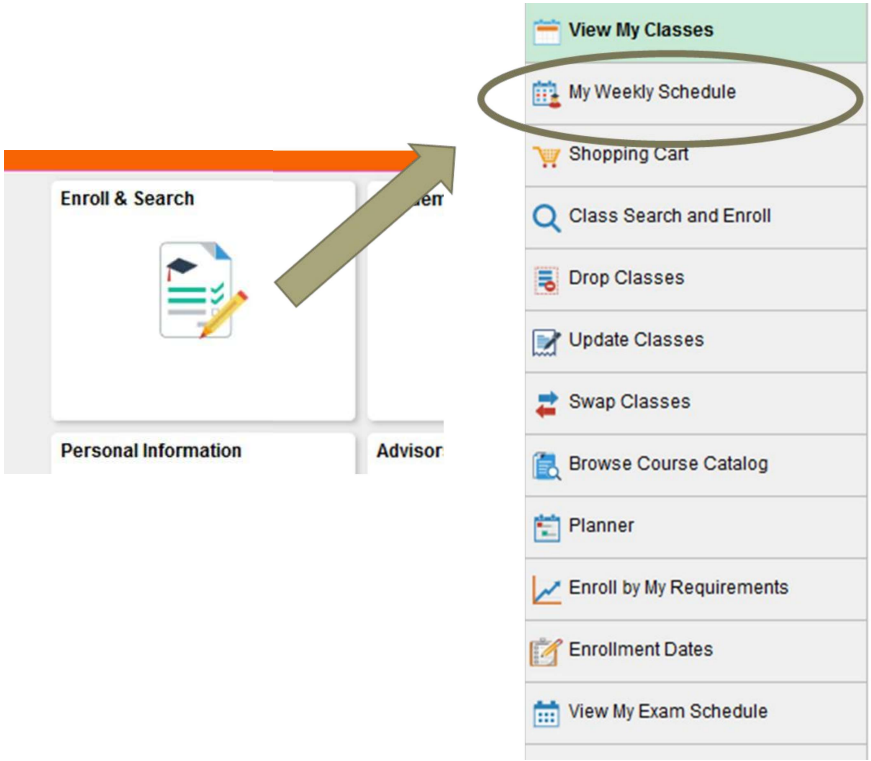


Understanding Your Fall Schedule

S

Fall Schedule

- Print-out in your folder
- Check SIS for up-to-date info



~ Homework for Sunday night ~

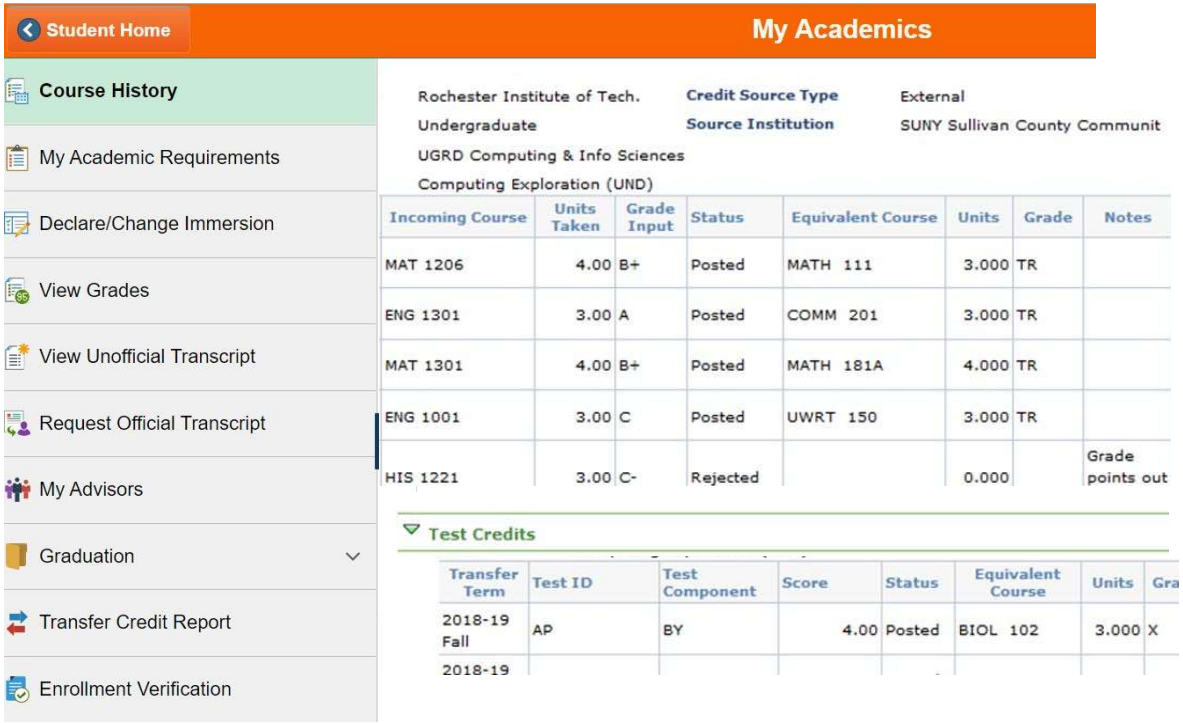
Take a SCREENSHOT of your schedule 📸

Typical First-Semester Schedule

GCIS-123 or GCIS-127	**Software Development**	4 credit
MATH-xxx	**Calculus or Discrete Math**	3-4 credit
ACSC-78	**Math Recitation** *paired with MATH-171 based on MPE*	0 credit
SWEN-101	**SE Freshman Seminar**	1 credit
YOPS-10	**RIT 365**	0 credit
	Gen Ed Perspective	3 credit
	Gen Ed Perspective	3 credit

**SE majors need Gen Ed Perspectives in these categories:*
Artistic, Ethical, Global, Social

Are my AP or transfer credits posted?

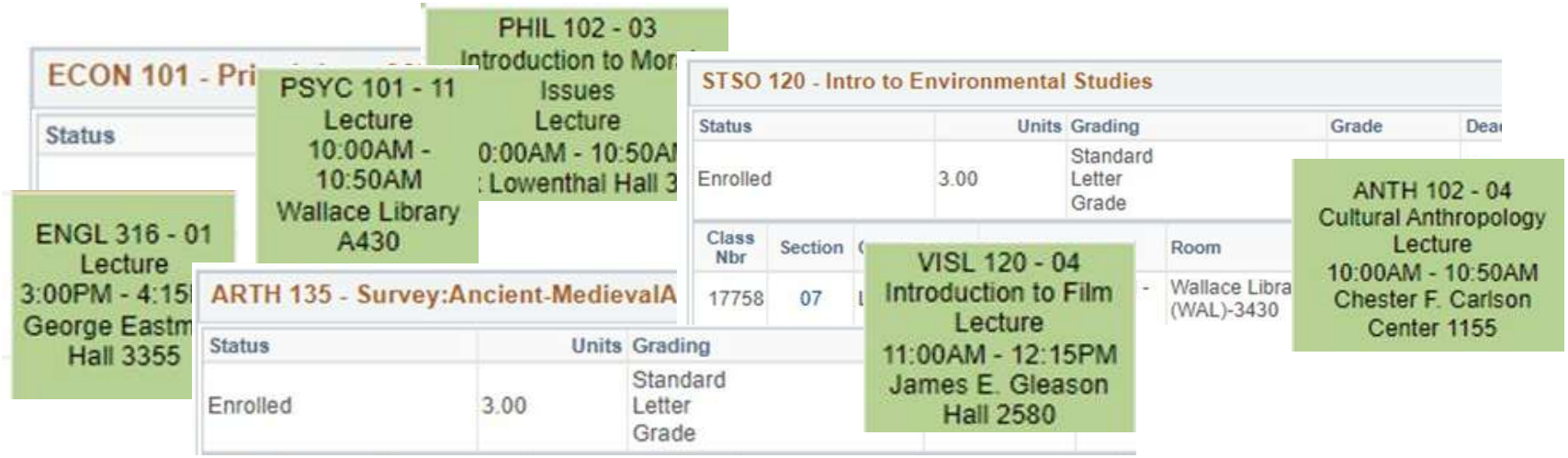


Common schedule questions

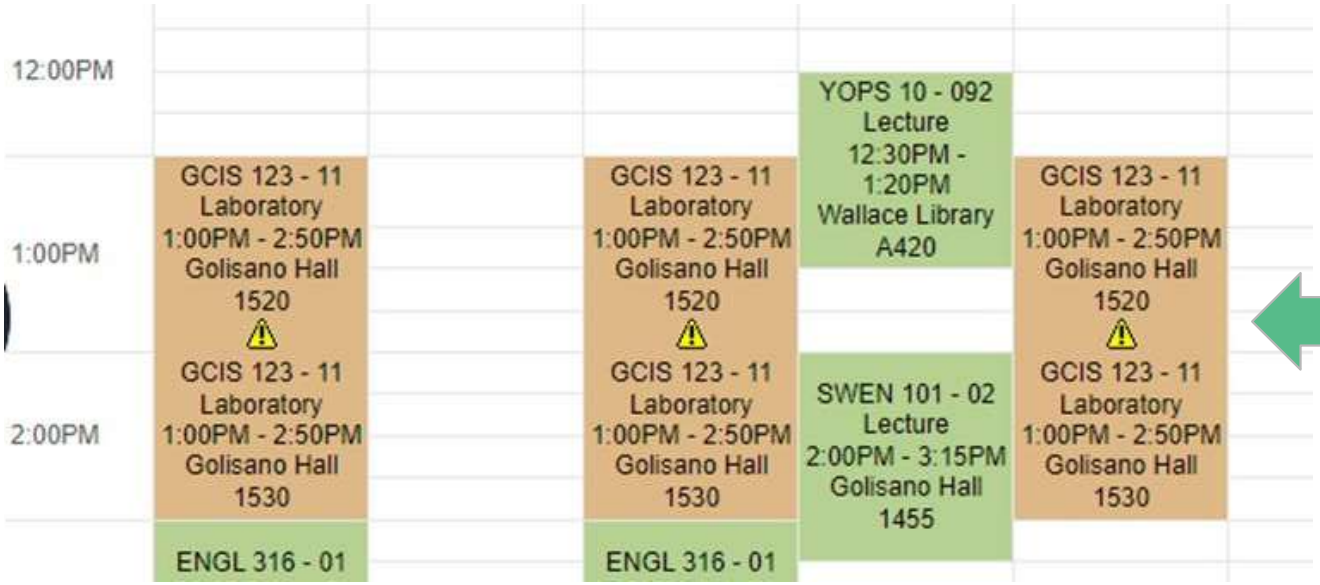
s

What is this random course?

- SE majors need ***Gen Ed Perspectives*** in these categories: Artistic, Ethical, Global & Social



Why do I have a time conflict?



Not a conflict!

Is this course online or in person?

1. **In person or Blended Learning**

Monday Aug 23	Tuesday Aug 24	Wednesday Aug 25	Thursday Aug 26	
GCIS 123 - 01 Laboratory 8:00AM - 9:55AM Golisano Hall 2730	PHIL 101 - 03 Lecture 8:00AM - 9:15AM Online ONLINE	GCIS 123 - 01 Laboratory 8:00AM - 9:55AM Golisano Hall 2730	PHIL 101 - 03 Lecture 8:00AM - 9:15AM Online ONLINE	GC L 8:00 Go

2. Online Synchronous

3. Online Asynchronous

SOCI(102)-Foundations of Sociology	01(LEC)15897		80	73	Kijana Crawford	TBA	Online

I'm in the Combined Accelerated Pathways program...

Is my schedule complete?

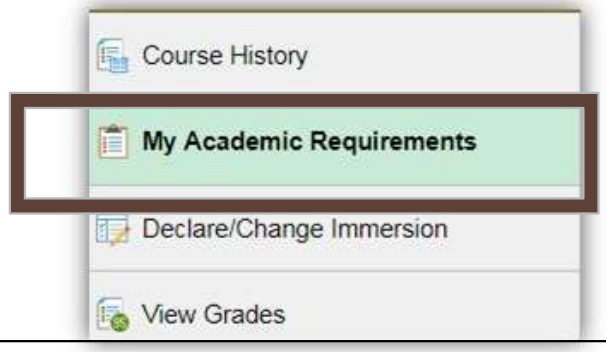
- Yes!

Is there anything I need to know now?

- The 1st and 2nd year are the same for all students
- Courses may diverge in 3rd or 4th year. Planning will begin in Year 2!

How do my courses count toward my degree?

- Use **Academic Requirements** in SIS to track your progress, and see how your courses and transfer credits apply to your degree requirements



Wow. Great. I still have questions.

Enrollment Lab & Open Advising

Today from 1:30 - 3 pm in GOL-1650

- ➔ For schedule changes & questions on Fall schedules
  - ◆ Learn to search, add, drop, swap & waitlist
  - ◆ 1:1 advising questions

<u>Optional</u> *- If your Fall schedule is set, no need to attend!*

S

Advising today -what to ask & what should wait?

Ask **TODAY** if it impacts your **Fall schedule,** such as:

- Schedule conflicts
- Enrolled in a course you already have AP or transfer credit for
- Concern about placement in Software or Calc sequences
- Issue with a disability accommodation

WAIT if it impacts a **future semester**, such as:

- Minors
- Double-majors
- Accelerated masters degree
- Co-ops
- Long term plans
- Study Abroad

S

Add/Drop & Course Withdrawal

Add/Drop Period: Today through **Tues, Sept 2, 2025** at 11:59pm

- Changes before add/drop deadline have no indication on your transcript
- Check with your advisor before changing any courses!

Withdrawal Period: September 3 - November 7, 2025

- Permanent W on academic transcript
- Will not affect GPA, but may impact financial aid or housing
- Talk with your advisor before withdrawing from a course

Advising checkpoints this Fall

- SWEN-101 advisor visits
- Required Fall Advising meeting
- Reach out when you need us!

Q&A

S

Up next:

- **Society of Software Engineers Activity:** Now!
- **Lunch:** 12:30-1:30
  - Where: Crossroads - follow the OL's
  - How: Location is Cashless. Use your Meal Plan, Tiger Bucks, or Dining Dollars
  - *Commuters & transfers: See Marie for a meal card*
- **Enrollment Lab & Advising** 1:30-3:00
  - GOL-1650
  - *Optional*

Society of
Software Engineers

Mentoring

Events

Projects

Networking

Come to SSE

- No need for appointment!
- Come in and work, ask questions when you have them!
- Mentoring hours: 10am-6pm
  - Volunteer mentors will be in the lab
  - Check out past tests to study
- Join our discord!

Our Discord