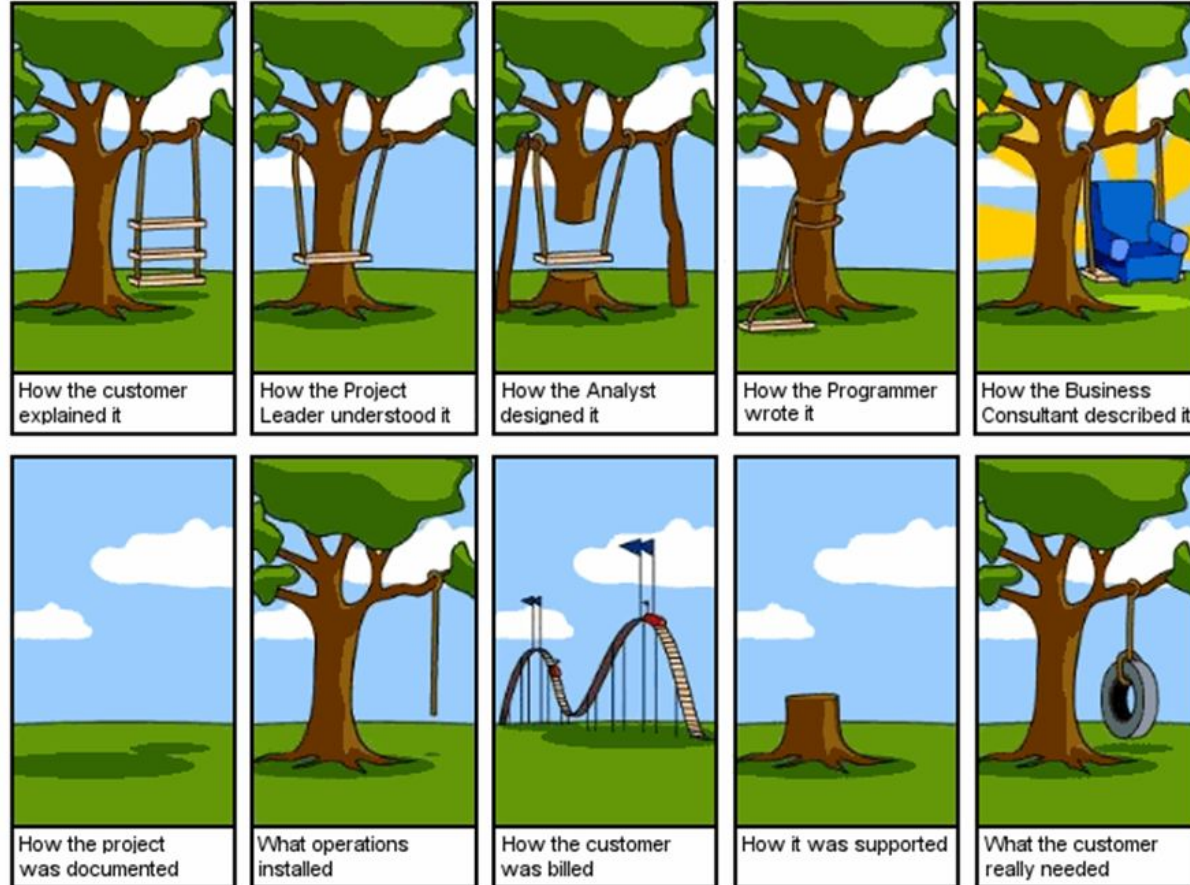


Welcome to Software Engineering!

Academic Day

August 19, 2021



Today's Agenda

- Software Engineering Program Overview (this!)
 - What did I sign up for?? What is SE?
 - Who are we?
 - Your (curricular) future
 - Unsolicited wisdom
- SE Advising
- Society of Software Engineering (SSE)
 - Presentation
 - Activity!
 - Lunch!

What is SE?

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

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. Naveen Sharma

Office Manager

Dawn Smith

Staff Assistant

Britt Stanford

Undergrad Program Coordinator

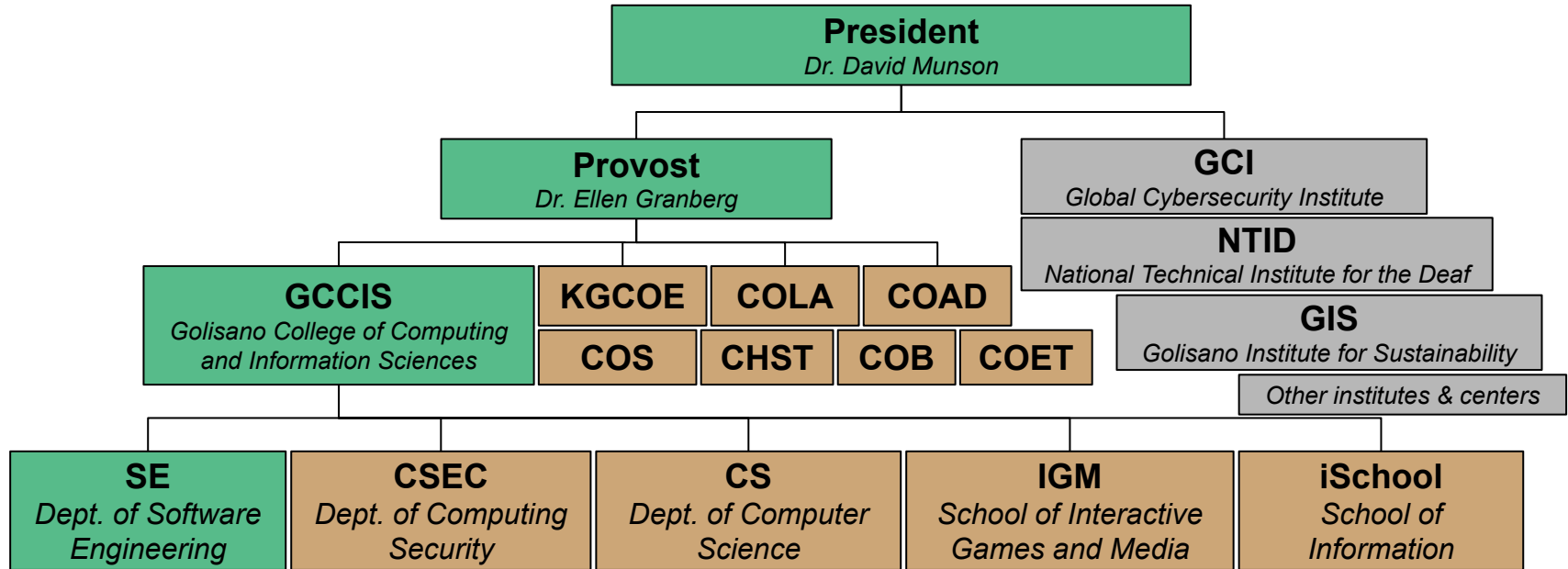
Dr. Andy Meneely

Academic Advisors

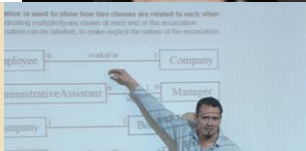
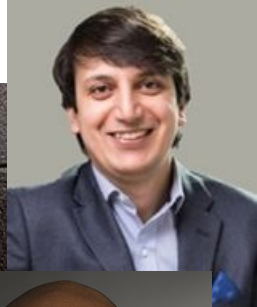
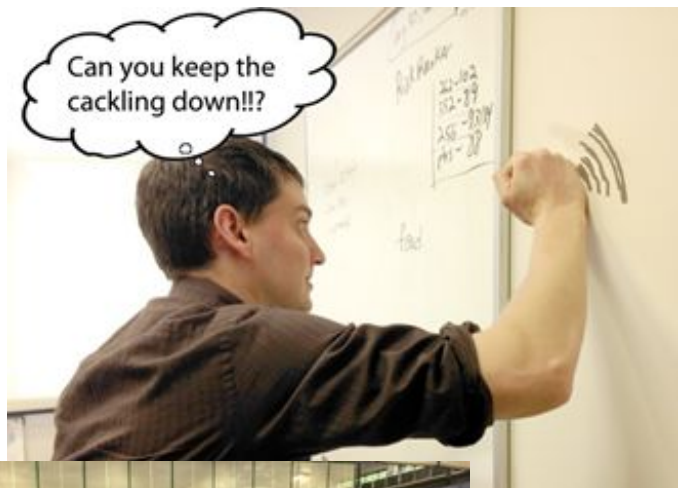
Carrie Koneski
Megan Lehman
Sarah Mittiga



RIT Organization



SE Faculty



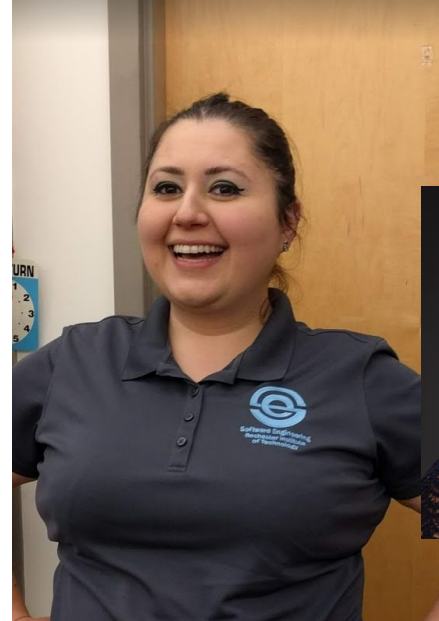
Tech Support

We've got our own GCCIS-related tech support!!

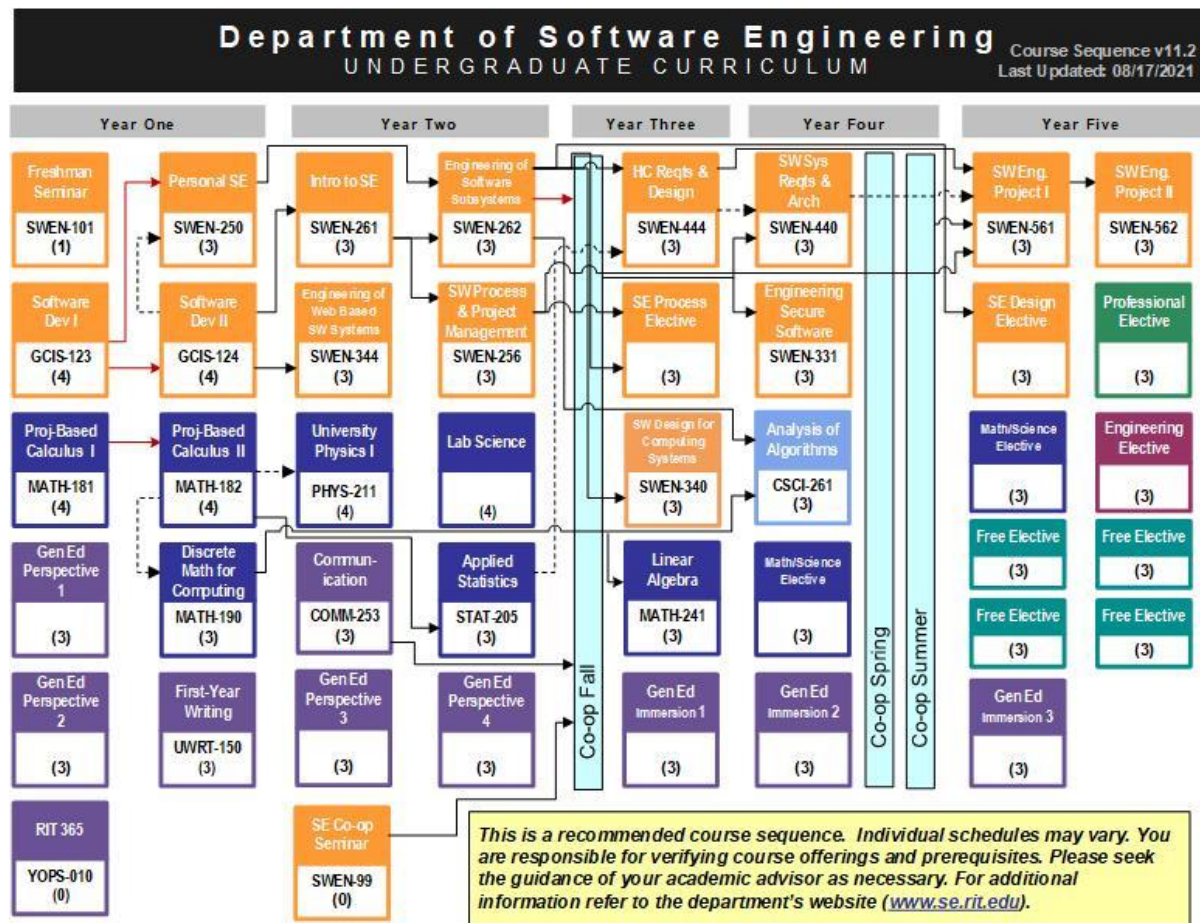
You have an **RIT account** *and* an **SE account**

- SE account password reset: knockknock.se.rit.edu
- For GCCIS servers, labs, etc.... gccisit@rit.edu
- Everything else: RIT Service Portal help.rit.edu

Tom Cary, Department Head
Arnela Stupac-Catello
James "Linus" Craig
Sam Water
Charles Gruener
Others...



The Flowchart



The 3 Eras

Pre Co-op Era

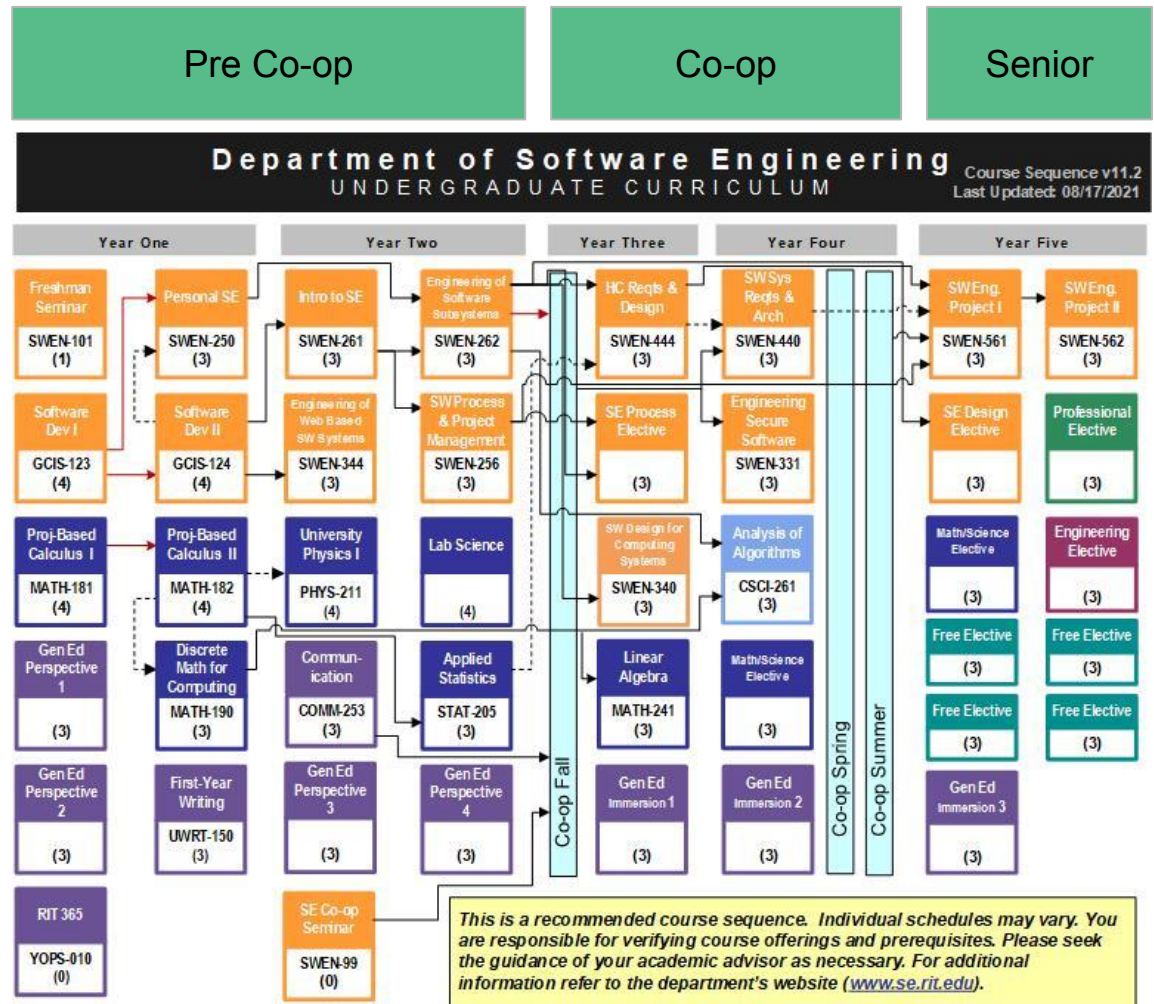
- Foundational courses
- C- or better on SWEN-262

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

SWEN-250 Personal SE

SWEN-261 Intro to SE

SWEN-262 Eng. of Software Subsystems

SWEN-256 SW Process & Project Management

SWEN-344 Web Engineering

Co-op

SWEN-331 Engineering Secure Software

SWEN-440 SW Requirements & Architectures

SWEN-444 Human-Centered Requirements & Design

SWEN-340 SW Design for Computing Systems

SWEN-561/2 SW Engineering Project I/II

*Make **small** things*

*Make things **pragmatically***

*Make a thing **with people***

***Design** things to be made*

***Organize** people to make things*

*Make **full-stack** things*

***Practice** making things*

***Defend** the things you make*

*Make **big** things*

*Make things for **humans***

*How things **really work***

*Do **all** the things*



Unsolicited Wisdom



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" WRONG
 - "Everyone else knows what to do except me" WRONG
 - "Real programmers wouldn't have to google this" WRONG
- 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)
 - Ask online (e.g. StackOverflow)



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 thinking
 - Always checking work

Notice how I did NOT say:

- Smart
- Loud
- Competitive
- Extraverted
- Best grades
- Proud
- Friends
- Leader
- Any gender, race, background, etc.



Academic Advising in SE



Academic Advisors in SE

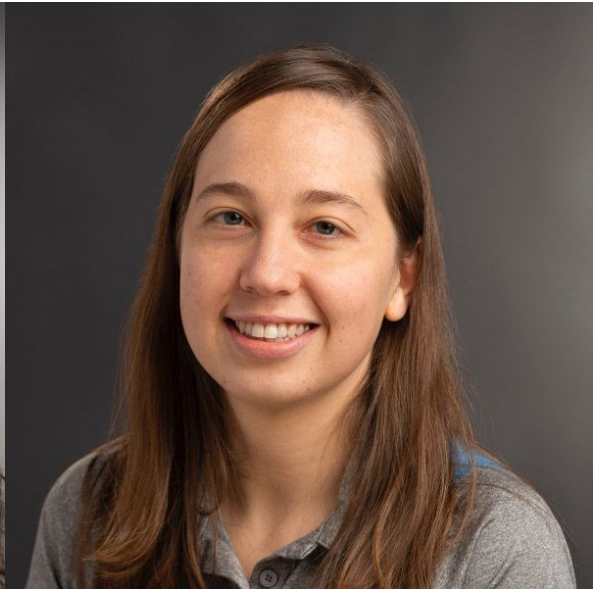
Carrie Koneski



Sarah Mittiga



Megan Lehman



Advising Roles

Your **advisor's** responsibilities

- Help with schedule and course plan
- Provide guidance to help you make informed decisions to work 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

FERPA Confidentiality Laws

- Federal restrictions on information shared about your academic record
- Advisors need your permission in order to discuss your record with your parents.

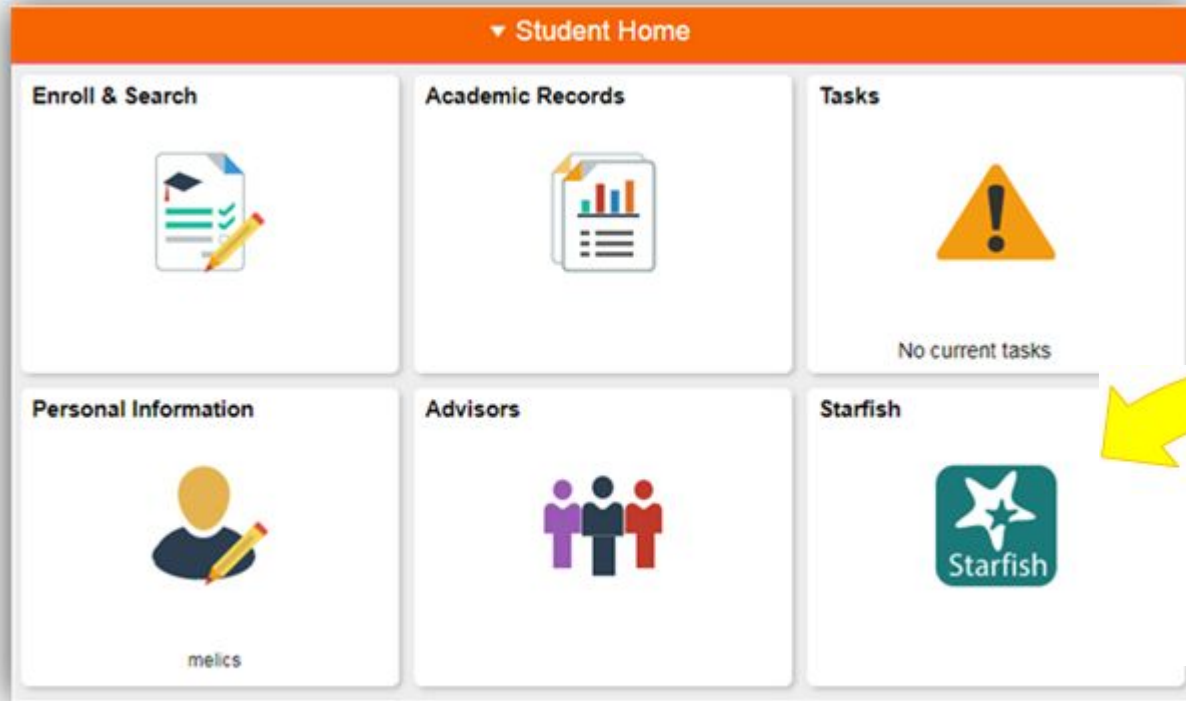


How do I contact my advisor?

- Email - Check RIT email daily, *response in 1-3 business days*
- Open Advising Hours
- Appointments secured through Starfish



How to get to Starfish





Understanding Your Fall Schedule



Typical First-Semester Schedule

Freshman

1. SE Freshman Seminar (1 credit)
2. Software Development
GCIS-123 OR CSCI-140 (4ch)
3. Mathematics (Calculus, Discrete Math, or Statistics)
4. Gen Ed Perspective
5. Gen Ed Pers. or First Year Writing
6. RIT 365 (0 credit)

Transfer

1. Software Development
GCIS-123 OR CSCI-242 (4ch)
2. ...
3. ...
4. [eh... there's no 'typical']
Customized to you, based on your incoming credits

Fall Schedule

View your schedule on SIS for up-to-date info

Homework for Sunday night -- Take SCREENSHOT of schedule and save to your device to reference or keep your paper schedule

Talk to your advisor if you have any questions

In some cases, we have questions for YOU!

If so, you have a tiger paw on your printed schedule



Common Question

I have an online course - when do I go to class?

Online Synchronous



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	GCIS 123 - 01 Laboratory 8:00AM - 9:55AM Golisano Hall 2730

Online Asynchronous



Meeting Information not available				
Class	Course Title	Instructor	Start Date	End Date
STSO 140 - 06 (Lecture)	Science, Technology & Values		08/23/2021	12/06/2021

Common Question

My Schedule indicates a time conflict - what should I do?



Common Question

Where do I view transfer credits that have been processed?

The screenshot displays a student portal interface. At the top, there is an orange navigation bar with a back arrow and the text "Student Home" on the left, and "My Academics" on the right. Below this, a sidebar menu is visible. The "Academic Records" option is highlighted with a brown rectangular box. A blue arrow points from the bottom left towards the "Transfer Credit Report" option in the sidebar menu. The main content area is titled "Course History" and features a filter icon (funnel) and a table with the following headers: "Class", "Description", "Term", "Grade", and "Units". The table body is currently empty.

Student Home

My Academics

▼ Student Home

Academic Records

Enroll & Search

Personal Information

meics

History

Academic Requirements

Change Immersion

ades

Official Transcript

Official Transcript

my ADVISORS

Graduation

Transfer Credit Report

Enrollment Verification

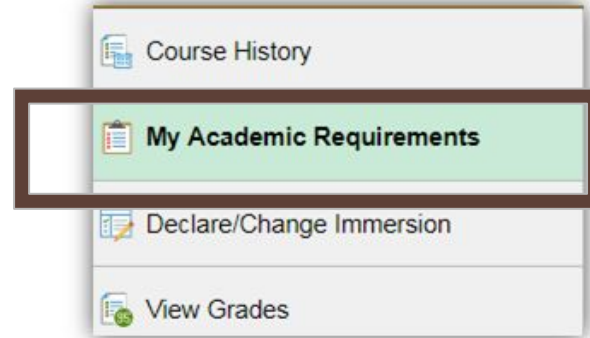
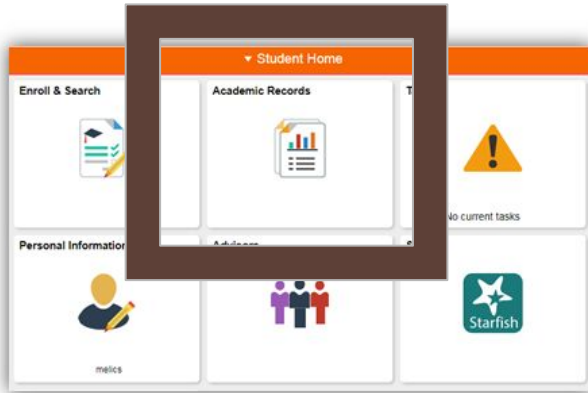
Course History

Filter

Class	Description	Term	Grade	Units
-------	-------------	------	-------	-------

SIS Academic Requirements

- A tool in SIS to help you keep track of how your courses and transfer credits apply to your degree requirements





Wow. Great. I still have questions.



Schedule Help this Week

1:1 advisor chat opportunities available *after* Enrollment Bootcamp (note: any student with question MUST attend the bootcamp)

Schedule Help this Week

Talk to your advisor **TODAY** if:

Your question is about your **fall schedule**, including:

- Schedule conflict
- Enrolled in a course you already have AP or transfer credit for
- Concern about your Soft Dev or Calc placement
- *A truly dreaded* Liberal Arts course

Talk to your advisor **NOT TODAY** if:

Your question is about **future terms**, including:

- Minors (or double-majors) (or accelerated pathways BS/MS)
- Co-ops
- Long term plans
- Transfer credit questions that do not impact fall courses
- Study Abroad



Notes on Fall Semester and Beyond



Open Advising in Software Engineering

Drop-in hours to discuss brief questions

- Struggles in the first few weeks of classes
- Questions on campus resources
- Any problem where you're not sure where to start



Typically M-F 10:30-11:30am

- Advisors will post their days each week in a google sheet

Add/drop week schedule is **expanded**

- each advisor emails students at the start of add/drop week.

Add/Drop & Course Withdrawal



Add/Drop Period: Today through **Monday, August 30th 11:59pm**

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

Withdrawal Period: Tuesday August 31st - Friday, November 5th

- 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

New Student Advising Meetings



- Meet one-on-one with your academic advisor during the **month of October**
- What do we discuss?
 - Ensure required courses are taken in the correct order
 - Discuss long-term plans and goals
 - Connect with resources on campus



Disclaimers on Academic Performance

What you need to know:

- If your term GPA is below 2.0, you will be on **Academic Probation**
- If your term GPA is below 1.0, you will be **suspended from RIT**



Important Resources and Organizations



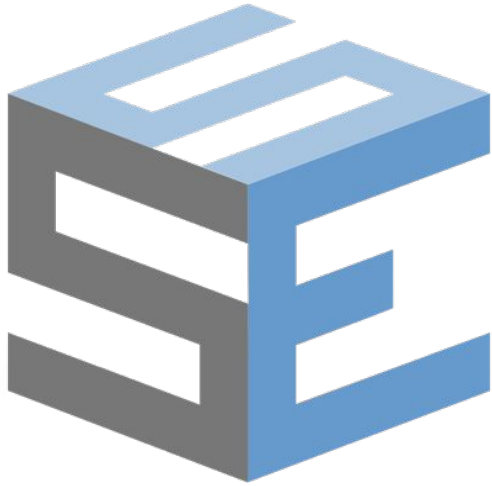
Academic Resources

Academic Success Center

- Peer Coaching
- Support with time management and study skills

Tutoring Services

- Society of Software Engineers
- GCCIS Tutoring Center
- Women in Computing (WiC)
- Bates Study Center and Sol on dorm side (math/physics)
- Writing Center



Society of
Software Engineers



Women in Computing @ RIT

WiC is an all-inclusive professional organization within the RIT community. Through fostering personal growth and professional development, WiC inspires confidence in its members in their careers in computing and beyond. As an inclusive organization, WiC supports all interested in computing while promoting the success and advancement of gender minorities in the field.

We offer the following to all RIT students:

- Networking and mentoring opportunities
- Professional development
- Leadership opportunities
- Technical skill advancement
- Community outreach



@RITWIC



RIT_WIC



Women in Computing at RIT



wic.rit.edu



GCCIS Embedded Counseling

Johnathan Elliott, LMHC

- Location (70-2265) Second Floor back Hallway
- On-Site M, T, R, F
- What we offer: Short Term Model
- How students can contact me:
 - **"Wellness Portal"** Private Message Directly
 - By contacting RIT Counseling and Psychological Services directly (585-475-2261) Request me directly with the person you contact.
- You are not required to be seen in GCCIS if you do not wish to be.



Quick Tips to Start Your Semester Off

1. Get to know your professors and advisors.
2. Schedule Self Care, Fun, Socializing and Leisure Time into your academic schedule.
3. Consider what habits you wish to begin/continue and move away from ones you do not.
4. Develop a good sleep schedule and eat well.
5. Don't fall into the trap of comparing yourself to others.
6. Ask for help sooner than later.

What Else is Happening Today:

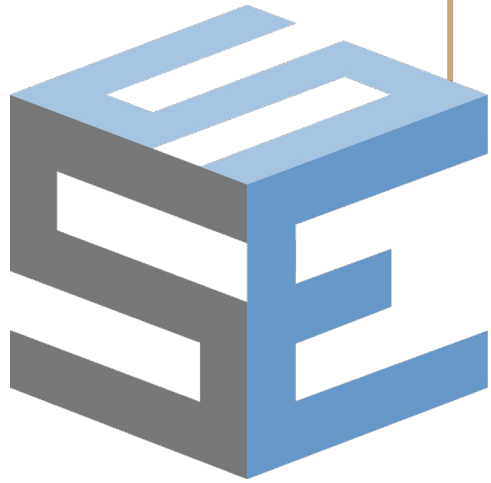
SSE's Build-It Challenge - Happening Next!

Lunch *provided in this room*

12:00-2:00pm **GCCIS College Fair** in Golisano Hall

1:30pm ***Optional* Enrollment Boot Camp** in GOL-1550 with 1:1 discussions thereafter

Later Today - GRIT **Survey** in your email inbox



Society of
Software Engineers

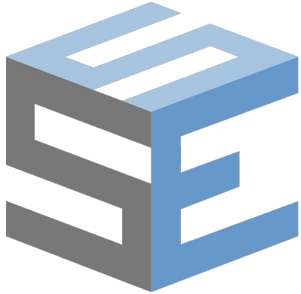
RIT

Mentoring

Events

Projects

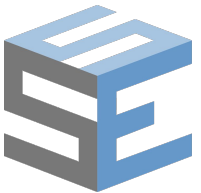
Networking



Mentoring



- Mentors on duty weekdays from 10am to 6pm.
- Resources
 - Test cabinet
 - Textbook library
 - Lab computers
- Review sessions



Events

- Box Fort
 - BBQ
 - PowerPoint Karaoke
 - Game Night
 - Bowling
 - Laser Tag
 - Trampoline Park
 - The Heist
- and more!



Events - Box Fort



Events - Winter Ball



Events - Heist, Lasertron, Altitude, and More!



Events - Talks

Object Methods

JS

```
var Member = function(name) {  
  this.name = name;  
  this.memberships = 0;  
}  
  
Member.prototype.getMemberships = function() {  
  return this.memberships;  
};
```

JS

ES6+

```
class Member {  
  constructor(name){  
    this.name = name;  
    this.memberships = 0;  
    this.getMemberships = () => this.memberships;  
  }  
}
```

Member
name: String
memberships: Number
getMemberships(): Number

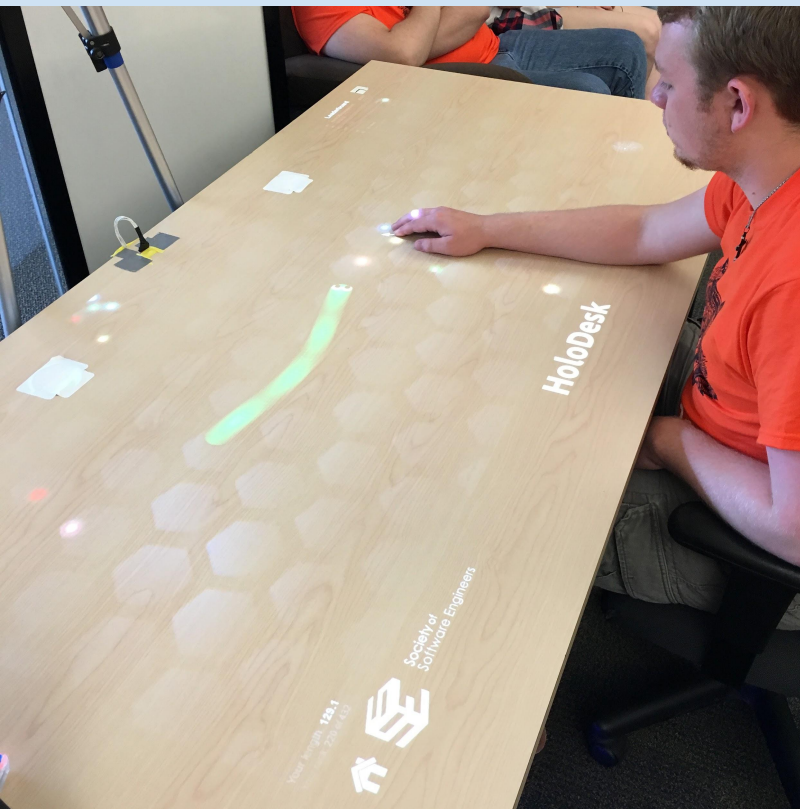
Programming Languages

EVERYTHING YOU WANTED TO KNOW & THEN SOME

A TALK BY "JOHN RENNER"



Projects



Networking

Google



Microsoft

intuit®



amazon

LOCKHEED MARTIN



datto

HubSpot



WILLOWTREE®



wayfair®



BAE SYSTEMS

HARRIS®

Constant Contact®



blackbaud™
your passion > our purpose

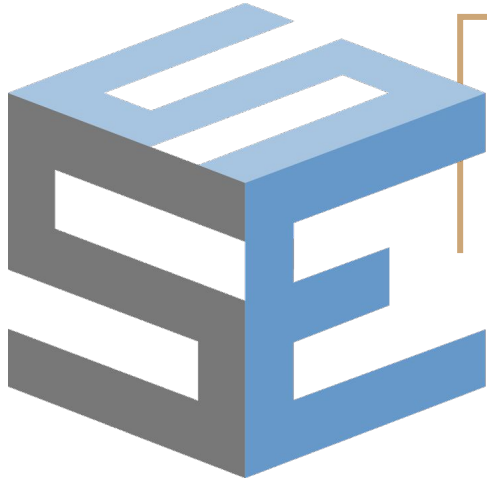
Networking - Company Visits



Anyone can get involved!

- Membership not required
- Non-SE majors welcome
- How to get involved
 - Join a project
 - Go to an event
 - Give a talk
 - Mentor a student
 - Be on a committee
 - Help out with open houses
 - *Hang out in the lab/ come to a general meeting!*
 - And more!





Society of
Software Engineers

Q & A