Computer & Information Technology (CIT) **CODO Presentation**



Computer & Information Technology (CIT)

The **Department of Computer and Information Technology** program educates professional practitioners and managers of information technology, accelerates information technology transfer to business and industry, and develops innovations in the application of emerging information technology through learning, engagement, and discovery by its faculty and students.

Computer & Information Technology offers a B.S. in Computer & Information Technology with the following major options:

- Computer & Information Technology (CNIT)
- Cybersecurity (CSEC) Available beginning Fall 2017
- Data Analytics, Technologies and Applications (DATA) Available beginning Fall 2021
- Computer Infrastructure and Networking Technology (INET) Effective Fall 2021 (Network Engineering Technology (NENT) Major name prior to Fall 2021)
- Systems Analysis & Design (SAAD)



CHARACTERISTICS OF SUCCESSFUL CIT STUDENTS

Successful CIT Students are:

- Inquisitive
- Self motivated
- Organized
 - Capable of planning and meeting deadlines
- Problem solvers
- Willing to work hard
- Team oriented
 - Significant out of class time is required for homework, projects, and laboratory activities



Computer & Information Technology (General) Major - CNIT

Computer and information technology courses provide students with strong technical skills, a thorough understanding of business needs, and the ability to communicate effectively with customers, peers, and industry leaders.

- Most flexible major
- Allows for 15 credits of upper-division CNIT or CGT courses of student's choice (pre-requisites must be met; up to 6 credits of other computing coursework may be considered for approval)
- Requires a non-computing minor (15 credits)
 - These credits fulfill Interdisciplinary Selectives
 - 15 discipline specific credits from your current major may be considered in lieu of a minor
- Requires six credits of Science of which at least three credits must have a lab component (student may choose to fulfill the six credits with all lab science course credits)
- Includes one Free Elective

https://polytechnic.purdue.edu/degrees/computer-and-information-technology

Computing Infrastructure and Network Engineering Technology-

Effective Fall 2021 Replaces: Network Engineering Technology – NENT – Availab

The world operates on the back of computers – networks of computers. Whether it is wired or wireless, information must be able to travel the network securely, efficiently and accurately. The network engineering technology major provides the necessary background about hardware and software infrastructure to solve networking problems.

- Courses in UNIX Administration, Electronic Systems, & Advanced Networking
- Prior to catalog term Fall 2020, requires two semesters of Physics to complete science requirement
- Fall 2020 and later, requires six credits of Science of which at least three credits must have a lab component (student may choose to fulfill the six credits with all lab science course credits)

• Students may change catalog term year to this later plan. https://polytechnic.purdue.edu/degrees/computing-infrastructure-and-network-engineering-technology



Cybersecurity Major - CSEC

Keeping data secure is an important goal of any good IT system. Once a system has been breached, personal, financial or classified data becomes vulnerable to exploitation. When you major in cybersecurity at Purdue University, you will learn the skills to create and maintain system integrity as well as ways to track down hackers who aim to breach that security.

- Courses in Cryptography, Cyber Forensics, Incident Response Management, Electronic Systems, & Criminology
- Requires six credits of Science of which at least three credits must have a lab component (student may choose to fulfill the six credits with all lab science course credits)
- Cybersecurity selective options: Homeland Security, Advanced coding security, & Malware forensics and many more
- The most prescriptive/least flexible major

https://polytechnic.purdue.edu/degrees/cybersecurity



Data Analytics, Technologies and Applications Major - DATA

Our digital lives consist of data and information. Industry and other organizations need to use that data and information to strengthen their decision-making processes, which means that they need information technology professionals who can enable, support and use data analytics and applications.

- Develop strong foundations in statistical and machine learning techniques. Apply analytics approaches, techniques and tools to solve problems.
- Evaluate such approaches, techniques and tools for effective use.
- Application Focus area (18 credits) by completing the Statistics minor and 9 credits in the Application focus areas of the Applications in Data Science Certificate or 18 non-CNIT credits from the Application focus are in the Applications in Data Science Certificate.
- Requires six credits of Science of which at least three credits must have a lab component (student may choose to fulfill the six credits with all lab science course credits)
- Includes one Free Elective

https://polytechnic.purdue.edu/degrees/data-analytics-technologies-and-applications



Systems Analysis & Design Major - SAAD

SAaD (Systems Analysis and Design)

Study how organizations use computer systems and procedures and then design information systems solutions to help them operate more efficiently and effectively. You will combine business processes and practices with programming, applications and databases. In the workforce, systems professionals work in a variety of industries and with people from a variety of professions.

- Requires a non-computing minor (15 credits)
 - These credits fulfill Interdisciplinary Selectives
 - 15 discipline specific credits from your current major may be considered in lieu of a minor
- Requires six credits of Science of which at least three credits must have a lab component (student may choose to fulfill the six credits with all lab science course credits)
- Includes Advanced Systems Design & Integration, Quality Management in IT, and more as selective options

https://polytechnic.purdue.edu/degrees/systems-analysis-and-design



PLAN OF STUDY CATALOG TERM

A student's catalog term, typically the semester you started at Purdue, will be used to determine the Major Change criteria that applies to you. Students can find their catalog term at the top of their myPurduePlan below the degree progress bar and FAQs.

Your default catalog term is the term that you started at Purdue, however, students may choose to pursue a major in a later catalog term if those degree requirements are preferred, or to pursue a new major that was added after you started at Purdue.



Interdisciplinary Selectives

6-15 CREDIT HOURS (DEPENDING ON MAJOR)

May be fulfilled by using one of the following:

- any University recognized noncomputing minor
- approved set of related courses to which IT can be applied

TIP:

Research the minor requirements for your current major & consider using it to fulfill your Interdisciplinary Selectives

Minor options for CIT Students *

https://catalog.purdue.edu/content.php?catoid=13&navoid=16362 (you may choose your catalog term year or a later year)

> *Computing related minors such as CS, ECE, **CGT minors, <u>are not available</u> as interdisciplinary selectives (**exception the CGT PLM minor is allowed)



PROFESSIONAL IT EXPERIENCE REQUIREMENT EFFECTIVE FALL 2016

MUST BE COMPLETED PRIOR TO GRADUATION (no additional credits awarded) May be fulfilled by one of the following:

Professional IT internship (six week minimum duration)
 240 hours of IT employment

- 240 hours of documented volunteer IT work
- Service Learning Course (EPCS*, CNIT 39000, or Equivalent) with responsibility for an IT component (3 credit hours minimum)

*participation in EPICS requires CIT faculty approval



myPurduePlan "What-If" Worksheet

HOW LONG WILL IT TAKE ME TO GRADUATE IF I SWITCH MAJORS?

Catalog Term Fall 2021 and after (Do not select a concentration)

Worksheets Pl Worksheets History	Ans Notes Except Format: Student View	Concess What-If	rered classes	r	ompleting najor/minor elections			
What If 🔷 🕻	Click here for my	PurduePlan What-If Help						
Look Ahead	Select your <u>primary</u> ar	rea of study						
	Catalog Term	Fall 2021 V						
	Campus	.West Lafayette Campus	Major	(pick a Major)	~			
	Level	Undergraduate 🗸	Concentration	(pick a Concentration)	*			
	Program	Comp Info Tech-BS	Minor	(pick a Minor)	~			
	College	Polytechnic Institute 🗸						
	Select your <u>additional</u> areas of study							
			Chosen Areas of study		_			
	Major	(pick a Major) 🗸						
	Concentration	(pick a Concentration) 🗸	Add					
	Minor	(pick a Minor)			-			
			Remove					
	Choose Your Future Classes							
	Enter a course and click Add Course Courses you are considering							
	Subject	·						
	Number Add	Course						

A video tutorial is available at: <u>https://mediaspace.itap.purdue.edu/media/mppWhatIf/1_znjslcot</u>



Click the Process

What-If button after

MYPURDUEPLAN "WHAT-IF" WORKSHEET

HOW LONG WILL IT TAKE ME TO GRADUATE IF I SWITCH MAJORS AND PLAN TO DOUBLE MAJOR WITHIN THE CIT PROGRAM

Worksheets Format: History Student View	Format:					
Look Ahead Select your primar	y area of study			major/minor		
Catalog Term Campus Level Program College	Fall 2021 West Lafayette Campus Undergraduate Comp Info Tech-BS Polytechnic Institute	Major Concentration Minor	(pick a Major) (pick a Concentration) (pick a Minor)	selections		
Select your <u>additio</u>				Select the		
Major	Comp Infrastr & Ntwk Engr Tech	Chosen Areas of s	tudy Infrastr & Ntwk Engr Tech	additional area of		
Concentration Minor	(pick a Concentration) (pick a Minor)		Ť	study and click the		
	Remove					
Choose Your Future Enter a course and click Subject Number				Add button		

A video tutorial is available at:

https://mediaspace.itap.purdue.edu/media/mppWhatIf/1_znjslcot



PLACEMENT

See Placement rates and data here: https://polytechnic.purdue.edu/data-dashboard



GRADUATE JOB TITLES & EMPLOYERS

Potential Job Titles:

- Application developer
- Business analyst
- Cyber Risk Consultant
- Data analyst
- Database administrator
- IT Consultant
- Network administrator
- Network consulting engineer
- Security specialist
- Software engineer
- Systems Analyst
- Technical Support Analyst
- Web Developer

Some (not all) Employers:

- Apple
- CIA
- Cisco
- Cummins
- Deloitte
- DoD
- Eli Lilly
- FBI
- Genesys

 (Interactive
 Intelligence)

- Intel
- Google
- John Deere
- Microsoft
- NSA
- Salesforce
 - State of Indiana
- USAA
- US Secret
 Service



Job Placement Resources & CIT Student Orgs

Student Employment (Federal Work Study and Student Employment Opportunities) https://www.purdue.edu/dfa/types-of-aid/work-study.html

Purdue Center for Career Opportunities: <u>https://www.cco.purdue.edu</u>

CIT Affiliated On Campus Career Fairs

CIT-AITP Career Fair Typically held in early September

Student Organizations

CIT Student Council

https://www.citstudentcouncil.org

Cyber Forensics Club

https://www.boilerlink.purdue.edu/organization/pcf

Minority Technology Association (MTA)

https://boilerlink.purdue.edu/organization/minoritytechnologyassociation

Women in Technology https://boilerlink.purdue.edu/organization/womenintechnology

Purdue Polytechnic Career Fair Typically held in February



CODO Requirements

Students on academic probation may not CODO into the CIT program.

There are two levels that students can qualify for CODO application:

- <u>3.25 cumulative GPA</u> and completion of all courses listed below with a C- or above will be *accepted* on space available basis.
- <u>3.24-3.00 cumulative GPA</u> with completion of all courses listed below with a Cor above will be *considered* for admission on space available basis.
- GPA calculators are available in myPurdue Plan or Krannert website: <u>http://www.krannert.purdue.edu/undergraduate/current-students/gpa.php</u>

• Nine course credits are required:

CNIT 17600, CNIT 18000 or CNIT 18200*
 *Students beginning Fall 2022 or later who are considering CSEC CODO should enroll in CNIT 17600 or CNIT 18200

and

o Calculus I (MA 16010/16100/16500),

and

Intro Composition Options: SCLA 10100, ENGL 10600; ENGL 10100; ENGL 10300; ENGL 10800; ENGL 11000 (fulfills Humanities requirement), HONR 19903

or

• Intro Oral Communication Options: SCLA 10200 COM 11400



CODO Process

To CODO in to CIT a student must do the following:

- Complete the online CODO presentation
 - Pass the associated quiz (**be sure to take a screenshot**)
- Email <u>CIT-Advising@purdue.edu</u> with the following:
 - Statement of desired CIT major
 - Attachment of CODO quiz screenshot
 - Attachment of myPurdue Plan What-If (**recommended**)
- Students will be contacted by CIT Advising with next steps and meeting options.
- Students who have completed or are enrolled in appropriate courses and who meet the minimum GPA at the end of the semester will be considered on a space-available basis.



Helpful Links

CIT Website

https://polytechnic.purdue.edu/departments/computer-and-information-technology

CIT CODO Website

<u>https://polytechnic.purdue.edu/degrees/computer-and-information-</u> <u>technology/advising/codo</u>

CIT Advising

<u>https://polytechnic.purdue.edu/degrees/computer-and-information-</u> <u>technology/advising/registration</u>

- Pre-Requisite Lists
- Independent Study Forms (may earn up to 6 credit hours)
- Registration Meeting Presentations
- Critical Path Documents
- Additional Resources

Career Fairs

Purdue Computer Career Fair: <u>https://polytechnic.purdue.edu/departments/computer-</u> and-information-technology/career-resources/computing-career-fair

Polytechnic Career Fair: <u>https://polytechnic.purdue.edu/career-fair</u>



What's next?

- Once grades are released at the end of the semester, they will be checked to ensure you have met CODO GPA and course requirements
- If accepted for CODO and all documents have been submitted, you will be notified by e-mail and added to the CIT-Announcements e-mail listserv
- CNIT course requests for 10000 and 20000 level courses will be considered on a space available basis. Submit the courses during your Registration meetings. If space is available, you will receive a seat, if not, during open registration you will need to resubmit your course request to be considered.
- Review Registration Meeting Presentation for semester updates: <u>https://polytechnic.purdue.edu/degrees/computer-and-information-technology/advising/registration</u>



CIT ADVISORS



Melody Carducci



Angie Murphy



Lisa Klein



Lauren Lucas



Zach Oborne

CIT Advising Contact Information: CIT-advising@purdue.edu

