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



Computer & Information Technology (CIT)

The **Department of Computer and Information Technology** 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) beginning Fall 2021
- Network Engineering Technology (NENT) (Prior to Fall 2021)
 - Computer Infrastructure and Networking Technology (INET) Effective 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
- 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



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



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
- Prescribed Interdisciplinary Selectives
- 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



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.

- Opportunity to customize plan by adding non-computing minor (15 credits)
- 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 Packaged App Software Solutions, Adv. Systems Design & Integration, and Software Development Methodologies as selective options

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



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)

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



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



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.



myPurduePlan "What-If" Worksheet

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

Catalo	g Term Fall	2015 and after (Do not s	select a concentration)	Click the Process What-If button after
Worksheets	Plans Notes Excepti Format: Student View	ions GPA Calc Process What-If Save as PDF		completing major/minor
	Click here for my	PurduePlan What-If Help		selections
Look Ahead	Select your <u>primary</u> are	ea of study		
	Catalog Term Level	Fall 2017 • Undergraduate •	Major	(pick a Major) ▼ (pick a Major)
	Degree College	Comp Info Tech-BS	Concentration Minor	Computer & Information Tech Cybersecurity Network Engineering Tech Systems Analysis & Design
	Select your <u>additional</u> a	areas of study	Chosen Areas of study	-)
				A
	Major Concentration	(pick a Major) ▼ (pick a Concentration) ▼	bbA	
	Minor	(pick a Minor) 🔻	Remove	Ψ
	Choose Your Future Cla			
	Enter a course and click Add C Subject Number	Course Courses you are considering		
	Add C	Remove Course		

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



myPurduePlan "What-If" Worksheet

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

Catalog Term Prior to Fall 2015 (must first choose the Major: Computer & Information Technology, and only choose a Concentration if pursing Network Engineering Technology)

Worksheets	Plans Notes Exception	s GPA Calc					major/minor
Worksheets	Format:	ocess What-If Save as PDF					
History	Student View V						selections
What If	Click here for myPu	rduePlan What-If Help					
Look Ahead							
	Select your <u>primary</u> area o						
	Catalog Term	Spring 2014 •		Major		Computer & Information Tech	•
	Level	Undergraduate 🔻		-			
	Degree	Comp Info Tech-BS		(pick a Concentration) (pick a Concentration)	•		
				Minor		Information Systems Tech	
	College	Polytechnic Institute				Network Engineering Tech	
	Select your <u>additional</u> are	as of study					
					Chosen Areas of study		
	Major	(pick a Major)	T				
	Concentration	(pick a Concentration)		Add			
			•	000000000000000000000000000000000000000			
	Minor	(pick a Minor)	Ŧ				-
					Remove		
	Choose Your Future Classe	25					
	Enter a course and click Add Cour	se Courses you are considering					
	Subject						
	Number						
	Add Cour	-					
		Remove Course					

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



MYPURDUEPLAN "WHAT-IF" WORKSHEET

HOW LONG WILL IT TAKE ME TO GRADUATE IF I SWITCH MAJORS AND PLAN TO DOUBLE MAJOR?

Worksheets Worksheets History What If	Format: Student View	Ceptions GPA Calc Process What-If Create PDF Include preregistered classes myPurduePlan What-If Help			What-If button after completing major/minor		
Look Ahead	Select your primar	ry area of study			selections		
	Catalog Term	Fall 2020 🗸			30100113		
	Campus	.West Lafayette Campus 🗸	Major	Cybersecurity ~			
	Level	Undergraduate 🗸	Concentration	(pick a Concentration) 🗸			
	Program	Comp Info Tech-BS	Minor	(pick a Minor) 🗸			
	College	Polytechnic Institute					
	Select your addition	onal areas of study			Select the		
			Chosen Areas of MAJOR : Netu	study work Engineering Tech	additional		
	Major	Network Engineering Tech			area of		
	Concentration	(pick a Concentration) ~	Add		study and		
	Minor	(pick a Minor)			click the		
			Remove		Add		
	Choose Your Futur	Choose Your Future Classes					
	Enter a course and click	Add Course Courses you are considering			button		
	Subject						
	Number						

A video tutorial is available at:

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



Click the

PLACEMENT

Graduates with jobs or in graduate school within 6 months 86.3%

Average Starting Salary \$64,613

Data published by <u>https://polytechnic.purdue.edu/data-</u> <u>dashboard</u>



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

Deloitte.

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/womenintechn ology

Purdue Polytechnic Career Fair Typically held in February



CODO Requirements

CODO students are considered on a semester-by-semester and space availability basis

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 C- or above will be *considered* for admission on space available basis.
 - CNIT 18000 or CNIT 17600,
 - Calculus I (MA 16010/16100/16500),

and

 SCLA 10100 (or ENGL 10600; ENGL 10100; ENGL 10300; ENGL 10800; ENGL 11000)

or

- \circ SCLA 10200 (or COM 11400)
- GPA calculators are available in myPurdue Plan or Krannert <u>http://www.krannert.purdue.edu/undergraduate/current-students/gpa.php</u>
 D



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**)
 - Attachment of signed form or acknowledgement statement in your email of <u>CIT Academic Policies and</u> <u>Guidelines</u>
- 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.

Academic Policies and Guidelines Form

Available <u>Here</u>

- Save a copy of the CIT
 Policies and Guidelines
 for your records
- Sign the form and attach or note in your email that you have read and acknowledge the policies.

PURDUE

Sample DEPARTMENT OF COMPUTER & INFORMATION TECHNOLOGY CIT Academic Policies and Guidelines for Admitted Students

The following information outlines CIT policies and expectations for your success.

At the time of your admission, you will be provided with a plan of study that outlines the requirements of the current curriculum. You are bound by the curriculum that is in effect at the time of your admission. It is your responsibility to maintain regular contact with departmental academic advisor, to monitor progress toward graduation, and to assure that all requirements are fulfilled to meet your planned graduation date.

In order to uphold the high quality of its educational program, CIT has established certain academic policies as outlined below: (CIT courses appear with the prefix CNIT)

- To be eligible to earoll in a CNIT course, a CIT major must have earned a grade of "C." or better in any prerequisite CNIT course(b). If you do not earn this grade, you will automatically be dropped from the post-requisite course. If you earn a "D" in a CNIT course that is not used as a prerequisite, you need NOT retake the class.
- CNIT courses may be taken no more than three times (inclusive of "W", "WF", or "WN", and "P" grades) in order to fulfill
 the above requirement. If the student has taken a course three times and does not fulfill the above requirement, the student
 will not be able to continue in the CIT program.
- A minimum grade point average of 2.0 is required in all CNIT courses in order to be certified for any CIT degree.
- The only course allowed to be taken pass/fail (Pass/Not-Pass Option) for credit in an undergraduate student's plan of study is the free elective.
- You may register for up to 18 hours of coursework. Credit hours in excess of 18 hours will be closely monitored by academic advisor and requires advisor approval with minimum GPA of 3.0.
- · CIT discourages students from taking more than three CNIT lab courses in the same semester.
- CIT students may earn credit by exam in up to four CNIT courses on their plan of study. To be eligible for credit by exam a
 student must be either newly admitted to the program or a currently enrolled student who has not received any grade
 (including W, WP, WP, VN, or 1) or a directed grade in the course for which helds be seeks credit by exam. The student must
 also not have previously taken any part of the equivalency test for the course in question. The student is expected to be wellversed with all of the course objectives and course topics either through similar courses taken at another educational
 institution and/or through practical experiences. CNIT courses available for credit by exam are: CNIT 15501, 17600, 18000,
 25501 and 27200. Contact the instructor of record for more information.

Faculty may have policies beyond those stated above. Be sure to read your syllabus for each course.

Your major responsibility is to work at a high academic level and to strive for academic excellence in all studies. In order to achieve these goals, students should adhere to the following guidelines:

- Prepare for and attend registration meetings in order to register for upcoming semesters.
- Take personal responsibility for reading and understanding all course materials, including the syllabus, textbooks, lab
 materials, and assignments.
- Show respect for faculty, staff, property, and other students.
- Conduct yourself in a professional, courteous manner in the classroom and throughout your academic career.
- · Take responsibility for your grades. Grades are earned by results and require effort.
- Do your own work academic dishonesty is not tolerated.
- Read CIT Announcements distributed via email to your @purdue.edu email address.
- Read and abide by the Student Bill of Rights and the University Regulations. https://www.purdue.edu/studentregulations/student_conduct/studentrights.html http://www.purdue.edu/studentregulations/

The CIT faculty and staff are here for your success! If you have questions, don't hesitate to ask!

Faculty provide office hours in course syllabi and posted on their office doors.

Academic Advisors office hours are posted at: <u>https://nolvtechnic.purdue.edu/degrees/computer-anti-information-</u> technology/advising. If you have questions visit your advisor daring posted office hours. You do not need to email to make an uppointment during these times.

I have read and understand the CIT policies:

Imogene Alice Student <u>clonogene Mice Student</u> <u>01-01-17</u> 765-494-0000_____ Printed Name Signature



Helpful Links

CIT Website <u>https://polytechnic.purdue.edu/departments/computer-and-</u> <u>information-technology</u>

CIT Advising

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

technology/advising/registration

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



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: polytechnic.purdue.edu/cit/advising

