

Data Analytics, Technologies, and Applications (DATA)

Purdue Polytechnic Institute

Department of Computer and Information Technology

Advising Worksheet

Disclaimer: The Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the corresponding Fall, Spring, and Summer semesters. The Advising Worksheet assists students in the development of an individualized 8-semester plan. Students are encouraged to use this worksheet and MyPurduePlan* (the online degree auditing tool) as they work with their academic advisor toward the completion of all their degree requirements.

Notification: Each student is ultimately responsible for knowing, monitoring, and completing all degree requirements.

An undergraduate degree in the Purdue Polytechnic Institute requires completion of the following degree requirements.

University Degree Requirements		
Minimum 2.0 Cumulative GPA	Minimum 120 Credits that fulfill degree requirements	32 Residency Credits (30000-level and above) at a Purdue University Campus
University Core Curriculum **		
https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html		
<ul style="list-style-type: none"> Human Cultures: Behavioral/Social Science Human Cultures: Humanities Information Literacy Oral Communication 	<ul style="list-style-type: none"> Quantitative Reasoning Science Science, Technology & Society Selective Written Communication 	
Civics Literacy Proficiency		
https://www.purdue.edu/provost/about/provostInitiatives/civics/		
Required Major Program Courses (see following pages)		
Departmental specific requirement <ul style="list-style-type: none"> A C- GPA is required across all CNIT courses Credit cannot be earned for both AGEC 21700 and ECON 21000 to fulfill degree requirements Credit cannot be earned for both COM 31400 and COM 31500 to fulfill degree requirements 		
Pass/No Pass option		
Non-course/Non-credit Requirements		
<ul style="list-style-type: none"> Complete a Professional Requirement. * Complete a Globalization Requirement. 		

* This audit is not your academic transcript and it is not official notification of completion of degree or certificate requirements.

** University Core Curriculum Outcomes may be met through completions of the Purdue Polytechnic Institute curriculum. Students should Consult with their academic advisors and MyPurdue Plan for course selections.

Department of Computer & Information Technology – Data Analytics, Technologies, and Applications Major (DATA) Worksheet
Academic Year 2024-2025

Name:
 PUID:
 Email:
 Advisor:

Updated:
 Minor/Cert:
 Additional Programs:
 Notes: (grad early, codo from, etc.)

Recommended Arrangement of CNIT Courses to meet prerequisites/ General Education courses are flexible and may be taken any semester*.
***Intro Composition Selective, Intro to Oral Communication Selective, MA 16010 and MA 16020 are recommended in the first year if space is available.**
See Supplemental Information Tab for Course Options

Fall 1 st Year	CR	Prerequisite	Status	Fulfilled by	Spring 1 st Year	CR	Prerequisite	Status	Fulfilled by
CNIT 18000 Intro to Systems Dev.	3				CNIT 15501 Intro to Software Dev.	3			
Intro Composition Selective*	3				CNIT 17600 Info Tech Architecture	3			
MA 16010 Applied Calculus I* (PREFERRED), or MA 16500 or MA 16100	3	ALEKS Score minimum of 75%			MA 16020 Applied Calculus II* (PREFERRED), or MA 16600 or MA 16200	3	MA 16020: MA 16010 with grade of C- or higher		
TECH 12000 Design Thinking in Tech.*	3				Intro Oral Communication selective*	3			
Behavioral/Social Science Selective*	3				Science Selective* (Non Lab or Lab Science)	3			
Total Credit Hours	15				Total Credit Hours	15			

Fall 2 nd Year	CR	Prerequisite	Status	Fulfilled by	Spring 2 nd Year	CR	Prerequisite	Status	Fulfilled by
CNIT 27200 Database Fundamentals	3	CNIT 15501 and (CNIT 18000 or CNIT 18200)			CNIT 25501 Object-Oriented Programming	3	CNIT 15501		
CNIT 28000 Systems Analysis & Design Method	3	(CNIT 18000 & or CNIT 18200)			CNIT 27000 Cybersecurity Fundamentals I	3	CNIT 17600 and (CNIT 15501 may be taken concurrently)		
CNIT 24200 System Administration	3	CNIT 17600			CNIT 39200 Data Management	3	CNIT 27200		
Cognate Application Concentration	3				Statistics Selective	3			
Lab Science Selective*	3				Cognate Application Concentration	3			
Total Credit Hours	15				Total Credit Hours	15			

Fall 3 rd Year	CR	Prerequisite	Status	Fulfilled by	Spring 3 rd Year	CR	Prerequisite	Status	Fulfilled by
CNIT 32200 Research Method and Design	3	STAT 22500, STAT 30100, STAT 50100 or STAT 51100			CNIT 32000 Policy, Regulation & Globalization	3	TECH 12000 & Junior Standing and third year		
CNIT 37200 Database Programming	3	CNIT 27200			CNIT 48200 Six Sigma Data Quality for Continuous Improvement	3	CNIT 28000 and (STAT 22500, STAT 30100, STAT 50100, or STAT 51100)		
Probabilities Selective	3				Accounting Selective	3			
Cognate Application Concentration	3				Economics Selective	3			
Professional Writing Selective	3				Professional Speaking Selective	3			
Total Credit Hours	15				Total Credit Hours	15			

Fall 4 th Year	CR	Prerequisite	Status	Fulfilled by	Spring 4 th Year	CR	Prerequisite	Status	Fulfilled by
CNIT 48000 Managing Information Technology	3	(CNIT 18000 or CNIT 18200) and Senior standing and last year			CNIT 48400 Applications in Data Science	3	CNIT 48300		
CNIT 48300 Applied Machine Learning	3	CNIT 25501 and (STAT 22500, STAT 30100, STAT 50100, or STAT 51100)			Cognate Application Concentration	3			
Cognate Application Concentration	3					3	Communications Selective		
Cognate Application Concentration	3				Humanities Selective*	3			
Ethics Selective	3				Free Elective	3			
Total Credit Hours	15				Total Credit Hours	15			

- 120 unique semester credits, as applied to your plan of study, and 2.0 Graduation GPA are required for the Bachelor of Science degree.
- 2.0 Graduation GPA in all CNIT courses required for Bachelor of Science degree.
- *Fulfills University Core.

- Students must earn a "C-" or better in all CNIT courses that are a prerequisite to another CNIT course.
- Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.
- 32 credit hours of 300-level or higher courses must be completed at Purdue University.
- The Department will provide lists of courses that will be offered fall only or spring only.

8a. Professional Requirement.	Criteria and process located in Brightspace - CIT Student Information Course (CourseTools: Assignments) and Professional IT Experience Tab
8b. Globalization Requirement.	CNIT 32000

The student is ultimately responsible for knowing and completing all degree requirements. Students are encouraged to use this advising worksheet as a resource when planning progress toward completion of degree requirements. An Academic Advisor may be contacted for assistance in interpreting this worksheet. This worksheet is not an academic transcript, and it is not official notification of completion of degree or certificate requirements.

Purdue University Catalog <https://catalog.purdue.edu> is knowledge source for specific requirements.

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Polytechnic Institute

2024-2025 DATA SUPPLEMENTAL INFORMATION (All prerequisites must be met.)

INTRO COMPOSITION SELECTIVE (3 credits)

SCLA 10100 Transformative Text, Critical Thinking and Communication I: Antiquity to Modernity - Preferred
ENGL 10600 First-Year Composition (restricted offerings)
ENGL 10800 Accelerated First Year Composition (restricted offerings)
HONR 19903 Interdisciplinary Approaches to Writing (GPA 3.0 Required)
Credit will be accepted in any University Core Curriculum approved Written Communication Course: <https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html> See Written Communication (WC)
Credit will also be accepted for transfer courses with the Course Code: IXUWC

PROFESSIONAL WRITING SELECTIVE (3 credits)

ENGL 41900 Multimedia Writing
ENGL 42000 Business Writing
ENGL 42100 Technical Writing
ENGL 42400 Writing for High Technology Industries (prereq Engl Comp + Tech 120 waives ENGL 30900 prereq)

INTRO ORAL COMMUNICATION SELECTIVE (3 credits)

COM 11400 Fundamentals Of Speech Communication
SCLA 10200 Transformative Texts, Critical Thinking And Communication II: Modern World
EDPS 31500 Collaborative Leadership: Interpersonal Skills
Credit will be accepted in any University Core Curriculum approved Oral Communication Course: <https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html> See Written Communication (OC)
Credit will also be accepted for transfer courses with the Course Code: IXUOC

COMMUNICATION SELECTIVE (*COM 11400 prereq) (3 credits)

COM 21000* Debating Public Issues
COM 21200 Approaches to the Study of Interpersonal Communication
COM 22400 Communicating in the Global Workplace
COM 25100 Communication, Information and Society
COM 30300 Intercultural Communication
COM 31400* OR COM 31500* Speech Communication of Technical Information (credit can only be used for one course)
COM 31800 Principles of Persuasion
COM 32000 Small Group Communication
COM 32400 Introduction to Organizational Communication

PROFESSIONAL SPEAKING SELECTIVE (*COM 11400 prereq) (3 credits)

COM 31400* OR COM 31500* Speech Communication of Technical Information (credit can only be used for one course)
COM 32000 Small Group Communication
COM 32500 Interviewing: Principles and Practice
COM 41500 Discussion Of Technical Problems

ACCOUNTING SELECTIVE (3 credits)

MGMT 21200 Business Accounting (Preferred)
MGMT 20000 Introductory Accounting

BEHAVIORAL SOCIAL SCIENCE SELECTIVE (3 credits)

<http://www.purdue.edu/provost/initiatives/curriculum/course.html> See: Human Cultures: Behavioral/Social Sciences (BSS)
Credit will also be accepted for transfer courses with the Course Code: IXBSS

COGNATE SELECTIVES (Pick one of the two options - cannot be fulfilled by CNIT)

Option One: Completion of Statistics Minor* and 9 credit hours in Application Focus area of the Applications in Data Science Certificate. (*AT LEAST 9 credits of the 15 credit hour minor must be STAT courses. IE 53000 and MA 41600 are considered STAT courses due to cross-listing.) **If pursuing this option, do not take STAT 30100.**

Option Two: Completion of 18 credits from the Application Focus area of the Applications in Data Science Certificate. **See Applications in Data Science Certificate requirements** at <https://catalog.purdue.edu/> with updates throughout the year appearing here: <https://www.science.purdue.edu/data-science/academics/undergrad-certificate-courses.html>

CNIT courses cannot be used to fulfill this requirement regardless of which option is pursued.

ECONOMICS SELECTIVE (3 credits)

AGEC 21700 Economics OR ECON 21000 Principles of Economics (credit can be only used for one course)
ECON 25100 Microeconomics
ECON 25200 Macroeconomics

ETHICS SELECTIVE (3 credits)

PHIL 207 Ethics for Technology, Engineering and Design
PHIL 208 Ethics of Data Science

FREE ELECTIVE (3 credits)

Any non duplicate course

HUMANITIES SELECTIVE (3 credits)

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>
See: Human Cultures: Humanities (HUM) Credit will also be accepted for transfer courses with the Course Code: IXHUM

PROBABILITIES SELECTIVE (3 credits)

STAT 22500 Introduction to Probability Models (prereq MA 16010)
STAT 31100 Introduction to Probability
STAT 41600 Probability

SCIENCE SELECTIVE 6 credits total required (3 CR minimum in a lab science)

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>
See: Science (SCI)
Credit will also be accepted for transfer courses with the Course Code: IXSCI

STATISTICS SELECTIVE (3 credits)

STAT 22500 Introduction to Probability Models
STAT 30100 Elementary Statistical Methods (**DO NOT TAKE IF PLANNING STATISTICS MINOR**)

STAT 50100 Experimental Statistics I
STAT 51100 Statistical Methods

CNIT Duplicate Credit Courses - Credit may be established toward degree requirements in only one course from each list *INCLUDING FREE ELECTIVE*

CNIT 15501 OR 10500
CNIT 18000 OR 18200
CNIT 32300 OR 42000
CNIT 32000 OR 37100

Professional IT Experience (See Separate Tab for Options)

PROFESSIONAL INFORMATION TECHNOLOGY(IT) EXPERIENCE REQUIREMENT

The Professional IT internship must meet the following requirements:

- Six-week (at 40 hours a week) minimum duration OR 240 hours of IT employment OR 240 hours of documented volunteer IT work
- Completed Employer Verification Form
- Completed Reflection Paper

OR

Service-Learning Course: project must be preapproved prior to completion: (CNIT 39000, EPCS: Engineering Projects in Community Service, TDM: The Data Mine, OR VIP- Vertically Integrated Projects, or Equivalent) with responsibility for an IT component (3 credit hours minimum) – this option does not require an Employer submission. Grade of C- or Better required.

Completed Reflection Paper

Upon completion of the Professional IT Experience, you will prepare a three-page, double-spaced Reflection Paper.

If you are graduating in the same semester of completion, the due date for the Employer Verification Form and the Reflection Paper is before the end of the 12th week. **It is highly recommended that you complete the documentation as soon as you finish your experience.**