ExcelTrack™ Bachelor of Science in Cloud Computing and Solutions Degree Plan

Core Requirements

CM107: College Composition I

Course	Name	Credit
CM107M1	Understanding What You Read—A Pathway to Reading and Writing Success	1
CM107M2	Using Language Appropriate to Audience and Writing Situation	1
CM107M3	Writing an Effective Academic Essay	1
CM107M4	Locating, Integrating, and Citing Reliable and Relevant Sources	1
CM107M5	Writing Effective Professional Documents	1

CM220: College Composition II

Course	Name	Credit
CM220M1	Defining Effective Communication in Different Contexts	1
CM220M2	Constructing Logical Arguments	1
CM220M3	Using Research to Support Academic and Professional Assertions	1
CM220M4	Articulating a Strong Written Argument	1
CM220M5	Communicating Solutions with Digital Media	1

CS212: Communicating Professionalism

Course	Name	Credit
CS212M1	Communicating a Professional Image	1
CS212M2	Harnessing Social Media	1
CS212M3	Communicating Professionally	1
CS212M4	Thinking Ethically and Critically	1
CS212M5	Communicating in Teams	1

MM207: Statistics

Course	Name	Credit
MM207M1	Examining Data	1
MM207M2	Graphical Methods	1
MM207M3	Variable Relationships	1
MM207M4	Applying Probability	1
MM207M5	Confidence Intervals	1

MM212: College Algebra

Course	Name	Credit
MM212M1	Factoring and Polynomials	1

Course	Name	Credit
MM212M2	Analyzing Rational and Radical Expressions	1
MM212M3	Solving Linear Equations and Graphing	1
MM212M4	Solving Quadratic Equations	1
MM212M5	Solving Exponential and Logarithmic Equations	1

MM250: Discrete Mathematics

Course	Name	Credit
MM250M1	Numbers and Logical Reasoning	1
MM250M2	Counting Techniques and Probability	1
MM250M3	Sets, Sequences, and Series	1
MM250M4	Graph Theory and Trees	1
MM250M5	Transition Diagrams	1

HU245: Ethics

Course	Name	Credit
HU245M1	Theories of Morality	1
HU245M2	Bioethics	1
HU245M3	Social Ethics	1
HU245M4	Business Ethics	1
HU245M5	Environmental Ethics	1

SC200: Discovering Science—Current Issues in a Changing World

Course	Name	Credit
SC200M1	Basic Scientific Principles and Their Limitations	1
SC200M2	Scientific Concepts Across Disciplines	1
SC200M3	How Science and Life Work Together	1
SC200M4	Technology Throughout History	1
SC200M5	Applying Science Day to Day	1

SS238: Engagement - Civic- and Citizen-Driven Public Policy

Course	Name	Credit
SS238M1	Civic Engagement and Public Policy	1
SS238M2	Public Policy in Theory and Practice	1
SS238M3	Political and Nonpolitical Processes	1
SS238M4	Intersections: Civic Engagement and Public Policy	1
SS238M5	Civic Agency and Special Interests	1

Total Core Requirements   45

Major Requirements

IT104: Introduction to Cybersecurity

Course	Name	Credit
IT104M1	Cybersecurity Overview	1
IT104M2	Security Assessments	1
IT104M3	Security Controls	1
IT104M4	Operations and Personnel Security	1
IT104M5	Current Threats and Future Issues	1

IN205: Routing and Switching I

Course	Name	Credit
IN205M1	Network Routing and Switching Concepts	1
IN205M2	IP Addressing Concepts	1
IN205M3	Router and Switching Configurations	1
IN205M4	Network Routing Protocols	1
IN205M5	VLAN Use	1

IT213: Software Development Concepts

Course	Name	Credit
IT213M1	Software Construction Core Concepts	1
IT213M2	Decision Structures and Iteration	1
IT213M3	Software Development History and Modeling	1
IT213M4	Functions and Arrays	1
IT213M5	Debugging and Testing	1

IT222: Introduction to Cloud Computing

Course	Name	Credit
IT222M1	Cloud Computing Concepts	1
IT222M2	Moving to Cloud Computing	1
IT222M3	Foundational Technologies and Architectures for Cloud Computing	1
IT222M4	Cloud Computing Design Patterns and Architecture	1
IT222M5	Financial Considerations for Cloud Adoption	1

IT227: Cloud Infrastructure Administration

Course	Name	Credit
IT227M1	Information Technology Infrastructures	1
IT227M2	Cloud Architecture Concepts	1
IT227M3	Cloud Orchestration Concepts	1
IT227M4	Cloud-Based Analysis	1
IT227M5	Working With a Cloud Provider	1

IT234: Database Concepts

Course	Name	Credit
IT234M1	Database Management Concepts	1
IT234M2	Data Definition Language	1
IT234M3	Data Manipulation Language	1
IT234M4	Advanced SQL	1
IT234M5	Analytical and Non-Relational Database Alternatives	1

IT273: Networking Concepts

Course	Name	Credit
IT273M1	Networking Concepts	1
IT273M2	Networked Environments	1
IT273M3	Data Transmission	1
IT273M4	Wide Area Networks and Wireless Technologies	1
IT273M5	Global Interconnectedness	1

IT275: Linux System Administration

Course	Name	Credit
IT275M1	Linux Software Packaging System	1
IT275M2	Configuring the Linux Operating System	1
IT275M3	Modifying Files	1
IT275M4	Creating Accounts	1
IT275M5	Configuring Security	1

IT278: Windows Administration

Course	Name	Credit
IT278M1	Windows Operating Systems	1
IT278M2	Windows Storage	1
IT278M3	Container Configuration	1
IT278M4	Virtual Machine Configuration	1
IT278M5	Virtualization Management	1

IT286: Network Security Concepts

Course	Name	Credit
IT286M1	Risk Assessment and Network Monitoring	1
IT286M2	Device and Infrastructure Security	1
IT286M3	Protections Measures	1
IT286M4	Cryptography	1
IT286M5	Security Awareness and Enforcement	1

IT303: Virtualization and Cloud Security

Course	Name	Credit
IT303M1	Virtual Operating System Concepts	1
IT303M2	Implementing Virtual Machines and Applications	1
IT303M3	Virtualization Technologies	1
IT303M4	Cloud-Based Solutions	1
IT303M5	Cloud Solution Cost Structures	1
IT303M6	Addressing Cloud-Based Security Threats	1

IT304: Application Development and Scripting in the Cloud

Course	Name	Credit
IT304M1	Cloud Architecture for Software Development	1
IT304M2	Scripting Languages Concepts	1
IT304M3	Implementing Scripting Languages in the Cloud	1
IT304M4	Programming Practices	1
IT304M5	Comparing Scripting Languages	1
IT304M6	Cloud-Based Software Development	1

IT306: Cloud Services Management

Course	Name	Credit
IT306M1	Regulating the Cloud Environment	1
IT306M2	Governance Considerations for Cloud Migration	1
IT306M3	Cloud Architecture for Systems	1
IT306M4	Service-Level Agreements	1
IT306M5	Functionality and Security Requirements for Cloud Environments	1
IT306M6	Designing Cloud Services	1

IT374: Linux Security

Course	Name	Credit
IT374M1	Linux Installation and Configuration	1
IT374M2	Information Gathering Process	1
IT374M3	Vulnerability Assessment Process	1
IT374M4	Target Discovery Process	1
IT374M5	Target Enumeration Process	1
IT374M6	Security Vulnerabilities	1

IT375: Windows Enterprise Administration

Course	Name	Credit
IT375M1	Windows Server Installation	1
IT375M2	Windows Server Advanced Configuration	1
IT375M3	Windows Server Active Directory Configuration	1
IT375M4	Network Services and Components	1

PURDUE GLOBAL
UNIVERSITY

Course	Name	Credit
IT375M5	Network Policy	1
IT375M6	Security Functions	1

IT403: Advanced Cloud Security

Course	Name	Credit
IT403M1	Cloud Architecture Security	1
IT403M2	Provider Regulations and Standards	1
IT403M3	Cloud-Based Risk Assessment Concepts	1
IT403M4	Risk Assessment Practices	1
IT403M5	Security Factors for Cloud Migrations	1
IT403M6	Recommended Cloud Solutions and Security	1

IT404: Security Testing for Cloud Applications

Course	Name	Credit
IT404M1	Software Development Testing Techniques	1
IT404M2	Security Testing Techniques	1
IT404M3	Testing Procedures for Cloud-Based Applications	1
IT404M4	Security Testing for Cloud Applications	1
IT404M5	Security Testing Strategy Alignment	1
IT404M6	Security Testing Strategies	1

IT413: Migrating Data and Applications to the Cloud

Course	Name	Credit
IT413M1	Application and Data Migration in the Cloud	1
IT413M2	Application and Data Migration Strategies	1
IT413M3	Cloud Migration Concepts	1
IT413M4	Migration Procedures	1
IT413M5	Business Requirements for Migrations	1
IT413M6	Recommended Cloud Migration Strategies	1

IT414: Software Development Operations in Cloud Environments

Course	Name	Credit
IT414M1	Cloud Architecture and Software Development	1
IT414M2	Development Operations	1
IT414M3	Continuous Delivery Concepts	1
IT414M4	Managing Software Development in the Cloud	1
IT414M5	Software Development Operations	1
IT414M6	Business Practices for Cloud-Based Software Development	1

PURDUE GLOBAL
UNIVERSITY

IT460: Systems Analysis and Design

Course	Name	Credit
IT460M1	Information Systems Concepts	1
IT460M2	Developing Logical Systems Models	1
IT460M3	Object Modeling	1
IT460M4	Development Strategies	1
IT460M5	Systems Architecture	1
IT460M6	Systems Implementation	1

IT473: Bachelor's Capstone in Cloud Computing and Solutions

Course	Name	Credit
IT473 OR IT469	Bachelor's Capstone in Cloud Computing and Solutions OR Bachelor's-Level Cloud Computing and Solutions Internship	6

Total Major Requirements   116

Total Elective Requirements   19