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Program Guidebook

Bachelor of Science, Information Technology (BSIT to MSIT)

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The Accelerated Information Technology Bachelor's and Master's Degree program provides an accelerated pathway for students to obtain two degrees. Students will first complete the Bachelor of Science in Information Technology portion, which introduces three graduate-level courses in place of similar undergraduate courses and provides credit towards students graduate studies. After completing the necessary bachelor's and bridge course work, students will receive the Bachelor of Science, Information Technology degree. In the next term, students will progress to the remaining graduate course work and, upon completion, will receive the Master of Science, Information Technology degree.

The Bachelor of Science in Information Technology degree is designed for students with little or no technical background or experience who want to start a career in IT or transition into the field from another career. The program begins with an overview of IT functions, information systems, and technology infrastructure across different industries and organizations, then focuses on key areas such as project management, networking, programming, data management, IT management, cloud computing, cybersecurity, AI, and agile methodologies. Reflecting the realities of a world where security, Cloud, AI, and emerging technologies are integral to productivity, the program equips graduates with a broad base of competitive, adaptable skills, preparing them to effectively harness these technologies and thrive in the future of work.

The Master of Science in Information Technology degree serves those with a technical background who are seeking to advance their careers in information technology roles. It includes core courses on topics such as communication, project management, financial planning, risk management, and agile processes, and then focuses on Cloud, cybersecurity, AI, and technology strategies, or in the product management specialization, the product lifecycle of product strategy, design, and launch. The degree assesses students through authentic, integrated, project-based work that directly reflects professional deliverables and tasks. Assessments incorporate cutting edge technology issues and tools.

Understanding the Competency-Based Approach

How do competency-based programs like those offered at Western Governors University (WGU) work? Unlike traditional universities, WGU does not award degrees based on completing a certain number of credit hours or a specific set of required courses. Instead, you will earn your degree by demonstrating your skills, knowledge, and understanding of essential concepts.

Progress through a degree program is measured not by the amount of time you spend in class but by your ability to demonstrate competency as you complete required courses along a Standard Path. To help you acquire the knowledge and skills you need to demonstrate competency and complete your courses and program, WGU provides a rich array of learning resources. Your program mentor will work closely with you to help you understand your program's requirements and help you create a plan for completing your courses. You will also work closely with course instructors as you engage in each course. As subject matter experts, course instructors will guide you through the content you must learn to demonstrate competency through the course assessments.

The benefit of this competency-based system is that it enables students who are knowledgeable about a particular subject to make accelerated progress toward completing a degree, even if they lack college experience. You may have gained skills and knowledge of a subject while on the job, accumulated wisdom through years of life experience, or already taken a course on a particular subject. WGU will award your degree based on the skills and knowledge you possess and can demonstrate—not the number of hours spent in a classroom.

Accreditation

Western Governors University is the only university in the history of American higher education to have earned initial accreditation from multiple regional accrediting commissions at once—earning simultaneous accreditation from ACCJC, HLC, NWCCU, and WASC. The university’s accreditation from the Northwest Commission on Colleges and Universities (NWCCU) was reaffirmed in March of 2024. In addition to institution-level accreditation, each school has at least one program that is accredited by a programmatic accreditation. All programmatic accreditations are managed by the Academic Engagement department. Contact compliance@wgu.edu for additional information.

The Degree Plan

The focus of your program is your personalized Degree Plan. The Degree Plan is a detailed blueprint of the courses you will need to complete in order to earn your degree. The Degree Plan also lays out the accompanying learning resources and assessments that compose your program. The list of courses in the Degree Plan is often referred to as the standard path. The amount of time it takes to complete your program depends on both the amount of new information you need to learn and the amount of time you plan to devote each week to study. Your program mentor and course instructors will help you assess your strengths and development needs to establish a study plan.

Students vary widely in the specific skills and information they need to learn. For example, some students may be highly knowledgeable in a particular subject matter and would not need to engage in new learning opportunities. Other students may find that portions of the program require them to learn new information and that they need to take an online class or participate in a study module to acquire the knowledge and skills needed to fulfill program competencies in that area. Some individuals may be able to devote as little as 15–20 hours per week to the program, while others may need to devote more time. For this reason, pre-assessments are there to help your program mentor form a profile of your prior knowledge and create a personalized Degree Plan.

How You Will Interact with Faculty

At WGU, faculty serve in specialized roles, and they will work with you individually to provide the guidance, instruction, and support you will need to succeed and graduate. As a student, it is important for you to take advantage of this support. It is key to your progress and ultimate success.

Upon your enrollment, you will be assigned a program mentor—an expert in your field of study who will provide you with regular program-level guidance and support from the day you start until the day you graduate. Your program mentor will set up regular telephone appointments (weekly at first) with you, which you will be expected to keep. The mentor will review program competencies with you and work with you to develop a plan and schedule for your coursework. Your program mentor will serve as your main point of contact throughout your program—helping you set weekly study goals, recommending specific learning materials, telling you what to expect in courses, and keeping you motivated. In addition to regular calls, your program mentor is available to help you resolve questions and concerns as they arise.

For many of the courses at WGU, you will be required to complete performance assessments. These include reports, papers, presentations, and projects that let you demonstrate your mastery of the required competencies. A separate group of faculty members, called evaluators, will review your work to determine whether it meets requirements. Evaluators are also subject matter experts in their field of evaluation. If your assessment needs further work before it “passes,” these evaluators, who review your work anonymously, will provide you with instructional feedback to help you meet evaluation standards and allow you to advance.

Connecting with Other Mentors and Fellow Students

As you proceed through your Degree Plan, you will have direct contact with multiple faculty members. These communications can take a variety of forms, including participation in one-on-one discussions, chats in the learning communities, and live cohort and webinar opportunities. As a WGU student, you will have access to your own personal MyWGU Student Portal, which will provide a gateway to your courses of study, learning resources, and learning communities where you will interact with faculty and other students.

The learning resources in each course are specifically designed to support you as you develop competencies in preparation for your assessments. These learning resources may include reading materials, videos, tutorials, cohort opportunities, community discussions, and live discussions that are guided by course instructors who are experts in their field. You will access your program community during your orientation course to network with peers who are enrolled in your program and to receive continued support through professional enrichment and program-specific chats, blogs, and discussions. WGU also provides Student Services associates to help you and your program mentor solve any special problems that may arise.

Orientation

The WGU Orientation course will introduce you to the fundamentals of WGU’s competency-based education (CBE) and the expectations, policies, and protocols for students enrolled in a WGU degree program. Orientation will introduce you to WGU’s wide range of support resources and success centers. It also will provide you with study strategies recommended by current students and faculty that will help you succeed as a WGU student. Orientation ends with your first assessment at WGU, providing an opportunity to experience WGU’s performance assessment process before you begin your degree-focused coursework. The Orientation course must be completed before you can start your first term at WGU.

Transferability of Prior College Coursework

Because WGU is a competency-based institution, it does not award degrees based on credits but rather on demonstration of competency. WGU undergraduate programs may accept transfer credits or apply a 'Requirement Satisfied' (RS) in some cases. Refer to your specific program transfer guidelines to determine what can be satisfied by previously earned college credits. Students entering graduate programs must have their undergraduate degree transcripts verified before being admitted to WGU. In addition to a program's standard course path, there may be additional state-specific requirements.

Click here for the Student Handbook

WGU does not waive any requirements based on a student's professional experience and does not perform a "résumé review" or "portfolio review" that will automatically waive any degree requirements. Degree requirements and transferability rules are subject to change in order to keep the degree content relevant and current.

Remember, WGU's competency-based approach lets you take advantage of your knowledge and skills, regardless of how you obtained them. Even when you do not directly receive credit, the knowledge you possess may help you accelerate the time it takes to complete your degree program.

Continuous Enrollment, On Time Progress, and Satisfactory Academic Progress

WGU is a "continuous enrollment" institution, which means you will be automatically enrolled in each of your new terms while you are at WGU. Each term is six months long. Longer terms and continuous enrollment allow you to focus on your studies without the hassle of unnatural breaks between terms that you would experience at a more traditional university. At the end of every six-month term, you and your program mentor will review the progress you have made and revise your Degree Plan for your next six-month term.

WGU requires that students make measurable progress toward the completion of their degree programs every term. We call this "On-Time Progress," denoting that you are on track and making progress toward on-time graduation. As full-time students, graduate students must enroll in at least 8 competency units each term, and undergraduate students must enroll in at least 12 competency units each term. Completing at least these minimum enrollments is essential to On-Time Progress and serves as a baseline from which you may accelerate your program. We measure your progress based onthe courses you are able to pass, not on your accumulation of credit hours or course grades. Every time you pass a course, you are demonstrating that you have mastered skills and knowledge in your degree program. For comparison to traditional grading systems, passing a course means you have demonstrated competency equivalent to a "B" grade or better.

WGU assigns competency units to each course in order to track your progress through the program. A competency unit is equivalent to one semester credit of learning. Some courses may be assigned 3 competency units while others may be as large as 12 competency units.

Satisfactory Academic Progress (SAP) is particularly important to students on financial aid because you must achieve SAP in order to maintain eligibility for financial aid. We will measure your SAP quantitatively by reviewing the number of competency units you have completed each term. In order to remain in good academic standing, you must complete at least 66.67% of the units you attempt over the length of your program—including any courses you add to your term to accelerate your progress. Additionally, during your first term at WGU you must pass at least 3 competency units in order to remain eligible for financial aid. We know that SAP is complex, so please contact a financial aid counselor should you have additional questions. *Please note: The Endorsement Preparation Program in Educational Leadership is not eligible for federal financial aid.

Courses

Your Degree Plan includes courses needed to complete your program. To obtain your degree, you must demonstrate your skills and knowledge by completing each course's assessment(s). You may be asked to demonstrate competency in a course in several different ways, including proctored exams, projects, essays, research papers, and simulations, among others. Certifications verified through third parties may also be included in your program as a way to demonstrate competency. More detailed information about each assessment is provided in the course of study.

Learning Resources

WGU works with many different educational partners, including enterprises, publishers, training companies, and higher educational institutions, to provide high-quality and effective learning resources that match the competencies you are developing. These vary in type, and may be combined to create the best learning experience for your course. A learning resource can be an e-textbook, online module, study guide, simulation, virtual lab, tutorial, or a combination of these. The cost of most learning resources are included in your tuition and Resource Fee. They can be accessed or enrolled for through your courses. Some degree-specific resources may not be covered by your tuition, and you will need to cover those costs separately. WGU also provides a robust library to help you obtain additional learning resources, as needed.

Mobile Compatibility:

The following Student Handbook article provides additional details about the current state of mobile compatibility for learning resources at WGU.

Mobile Access for Learning Resources

Standard Path

As previously mentioned, competency units (CUs) have been assigned to each course in order to measure your academic progress. If you are an undergraduate student, you will be expected to enroll in a minimum of 12 competency units each term. Graduate students are expected to enroll in a minimum of 8 competency units each term. A standard plan for a student for this program who entered WGU without any transfer units would look similar to the one on the following page. Your personal progress can be faster, but your pace will be determined by the extent of your transfer units, your time commitment, and your determination to proceed at a faster rate.

Standard Path *for* Bachelor of Science, Information Technology (BSIT to MSIT)

Course Title	CUs	Term
Introduction to IT	3	1
Business Productivity Software	3	1
Influential Communication through Visual Design and Storytelling	3	1
Health, Fitness, and Wellness	4	1
Technology and Ethics: Emerging Trends and Society	3	2
Critical Thinking: Reason and Evidence	3	2
Business of IT - Applications	4	2
Composition: Successful Self-Expression	3	2
Introduction to Systems Thinking and Applications	3	3
Project Management	4	3
Applied Probability and Statistics	3	3
Practical Applications of Prompt	2	3
Linux Foundations	3	4
IT Foundations	4	4
American Politics and the US Constitution	3	4
Digital Transformation in the Enterprise	2	4
Fundamentals of Spreadsheets and Data Presentations	3	5
Agile Methodology	3	5

IT Applications	4	5
Information Technology Management and Leadership	3	5
Web Design Fundamentals	3	6
Network and Security - Foundations	3	6
Applied Algebra	3	6
Cloud Applications	3	6
Data Management - Foundations	3	7
Networks	4	7
Technical Communication	3	7
Natural Science Lab	2	7
Global Arts and Humanities	3	8
Network and Security - Applications	4	8
Foundations of Programming (Python)	3	8
Technology Governance	3	8
Data Management - Applications	4	9
Python for IT Automation	3	9
Cloud Foundations	3	9
Total CUs	110	

Changes to Curriculum

WGU publishes an Institutional Catalog, which describes the academic requirements of each degree program. Although students are required to complete the program version current at the time of their enrollment, WGU may modify requirements and course offerings within that version of the program to maintain the currency and relevance of WGU's competencies and programs. When program requirements are updated, students readmitting after withdrawal from the university will be expected to re-enter into the most current catalog version of the program.

Areas of Study for Bachelor of Science, Information Technology (BSIT to MSIT)

The following section includes the areas of study in the program, with their associated courses. Your specific learning resources and level of instructional support will vary based on the individual competencies you bring to the program and your confidence in developing the knowledge, skills, and abilities required in each area of the degree. The Degree Plan and learning resources are dynamic, so you need to review your Degree Plan and seek the advice of your mentor regarding the resources before you purchase them.

IT Fundamentals

Introduction to IT

Introduction to IT introduces the fundamental concepts, structures, and roles of information technology (IT) within an organization. The course is structured to provide a comprehensive understanding of the various aspects of IT, including networking, database management, cybersecurity, artificial intelligence (AI), and software development. This course also explores the essential components of the typical technology infrastructure for various types of organizations, the role and interaction of each component, and the evolving nature of technology and its implications for business practices. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner describes a company's technology infrastructure and the role of each component.*
- *The learner describes the areas of IT and their functions within an organization.*
- *The learner explains the evolving nature of technology and its implications for business and IT practices.*

Business Productivity Software

Business Productivity Software prepares students to effectively use business productivity software to enhance efficiency, streamline communication, and support collaboration for their personal projects within an IT team setting. The course will explore a range of productivity software, including communication, collaboration, organization, and presentation software. The course covers each tool's features and functions, how the tools contribute to optimizing productivity, and their role in facilitating clear communication and collaborative efforts. The course examines how to use these tools for productivity while following their organizations' technology policies and best practices. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner applies business productivity software to communicate and share work output with stakeholders.*
- *The learner applies business productivity software to organize and present information.*
- *The learner applies business productivity software to organize individual work.*

IT Foundations

IT Foundations provides learners with an understanding of personal computer components and their functions in a desktop system; a knowledge of computer data storage and retrieval; and skills in classifying, installing, configuring, optimizing, upgrading, and troubleshooting printers, laptops, portable devices, operating systems, networks, and system security. This course also gives learners the ability to recommend appropriate tools, diagnostic procedures, preventative maintenance, and troubleshooting techniques for personal computer components in a desktop system; strategies for identifying, preventing, and reporting safety hazards and environmental or human accidents in technological environments; and effective communication skills for interacting with colleagues and clients, including job-related professional behavior. The course prepares learners for the CompTIA A+ Core 1 certification exam.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner configures common hardware and software components of mobile devices.*
- *The learner configures common hardware in computer systems.*

- *The learner configures wired and wireless networks.*
- *The learner creates client-side virtualization with cloud computing components.*
- *The learner troubleshoots hardware, software, and network issues with best practice methodologies.*

Digital Transformation in the Enterprise

Digital Transformation in the Enterprise provides an in-depth exploration of digital transformation within modern organizations. Students will evaluate emerging technologies and their potential to drive organizational improvement, focusing on the strategic assessment and integration of technology to enhance business processes and performance. The course covers the latest trends in digital innovation, methods for assessing and selecting appropriate technology solutions, and strategies for implementing digital transformation initiatives. By the end of the course, students will be equipped with the skills necessary to analyze business needs, propose technology solutions, and effectively manage the change associated with digital transformation. This course is designed for students who aspire to lead or contribute to digital transformation efforts in their organizations, ensuring they are prepared to leverage technology to create a competitive advantage in the rapidly evolving business landscape. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner evaluates technology for organizational improvement.*
- *The learner proposes integrating new technology to solve a business need using research and data supported storytelling.*

Agile Methodology

Agile Methodology introduces students to agile's principles, practices, and mindset, focusing on adaptability, collaboration, and value delivery in dynamic team environments. This course explores how agile methodologies such as scrum, Kanban, and Lean empower teams to respond to change, prioritize meaningful work, and achieve shared goals through iterative progress. Students will develop skills in facilitating agile ceremonies, managing backlogs, and fostering transparency and alignment while building cohesive, self-organizing teams that value inclusivity and psychological safety. Through real-world scenarios and hands-on exercises, students will embrace agile values and principles to enhance collaboration, continuous improvement, and success across diverse contexts. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner applies agile methodology to contribute to projects.*
- *The learner implements effective collaboration and communication practices within agile teams.*

IT Applications

IT Applications introduces skills in identifying operating systems and their configurations and in implementing security principles across devices and networks. Learners will also gain skills in troubleshooting software, security, and malware issues, and in implementing basic operational procedures in documentation, change management, compliance, and communication. The course will introduce basic disaster recovery and business continuity procedures, scripting basics, and remote access technology solutions. The course prepares learners for the CompTIA A+ Core 2 certification exam.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner identifies operating systems and their configurations.*
- *The learner identifies remote access technology solutions.*
- *The learner identifies scripting basics.*
- *The learner implements basic disaster recovery and business continuity procedures.*
- *The learner implements basic operational procedures in documentation, change management, compliance, and communication.*
- *The learner implements security principles across devices and networks.*
- *The learner troubleshoots software, security, and malware issues.*

Foundations of Programming (Python)

Foundations of Programming (Python) introduces students to the fundamental principles of programming using Python. This course is designed to equip students with the essential skills needed to write, troubleshoot, and debug simple Python programs. Students will explore the syntax and structure of Python, develop an understanding of variables, loops, and conditional statements, and learn to work within different development environments, including integrated development environments (IDEs) and text editors. By the end of the course, students will be able to create functional Python programs, manipulate data structures, and apply debugging techniques across various platforms. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner creates functional programs by writing and debugging code.*
- *The learner executes Python code in different development environments.*
- *The learner identifies basic Python programming constructs to create simple functions.*
- *The learner manipulates data structures to effectively store, retrieve, and process data.*

General Education

Influential Communication through Visual Design and Storytelling

Influential Communication through Visual Design and Storytelling provides learners with foundational visual design and storytelling techniques to influence and create a lasting impression on audiences. Learners will first explore how human behavior is influenced by visuals and when to apply visual techniques to better communicate with audiences. Next, learners will learn techniques for creating compelling stories that create memorable images within the audience's mind. Ultimately, learners who master these skills will be well-positioned to apply their visual and storytelling techniques to not only better communicate their thoughts and ideas to an audience, but to also influence or motivate them.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner adapts communications to the basic needs and motivations of their audience.*
- *The learner applies storytelling techniques to motivate, inform, or influence a target audience.*
- *The learner applies visual design techniques to motivate, inform, or influence a target audience.*

Health, Fitness, and Wellness

Health, Fitness, and Wellness focuses on the importance and foundations of good health and physical fitness—particularly for children and adolescents—addressing health, nutrition, fitness, and substance use and abuse.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate identifies factors that influence mental, emotional, and social wellness.*
- *The graduate identifies the application of the core competencies of social and emotional learning.*
- *The graduate identifies the influence of disease, fitness, and lifestyle on the body.*
- *The graduate identifies the principles of nutrition and the components of a healthy diet.*

Technology and Ethics: Emerging Trends and Society

Technology and Ethics: Emerging Trends and Society explores the intersection of ethical thinking and technological innovations. A foundational introduction to ethical frameworks is applied to emerging trends in technology, including artificial intelligence, social media, and other forms of digital media. This course examines the impact of technology on our understanding of self, as well as the individual’s role in interacting with others in a globalized society. The course helps students gain the ability to recognize ethical actions within the context of current and newly evolving technological landscapes. This course has no prerequisites.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner analyzes privacy ethics and identity as related to emerging technologies.*
- *The learner applies ethical concepts to emerging technology as it relates to society.*
- *The learner describes ethical decision-making frameworks as applied to technology.*

Critical Thinking: Reason and Evidence

In this course you will learn key critical thinking concepts and how to apply them in the analysis and evaluation of reasons and evidence. The course examines the basic components of an argument, the credibility of evidence sources, the impact of bias, and how to construct an argument that provides good support for a claim. The course consists of an introduction and four major sections. Each section includes learning opportunities through readings, videos, audio, and other relevant resources. Assessment activities with feedback also provide opportunities to check your learning, practice, and show how well you understand course content. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to gain proficiency in the four competencies that will be covered in the final assessment. If you have no prior knowledge or experience, you can expect to spend 30-40 hours on the course content.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner evaluates bias and its impact.*
- *The learner evaluates evidence based on source credibility.*
- *The learner evaluates the quality of an argument.*
- *The learner makes claims based on evidence.*

Composition: Successful Self-Expression

Welcome to Composition: Successful Self-Expression! In this course, you will focus on four main topics: professional writing for a cross-cultural audience, narrowing research topics and questions, researching for content to support a topic, and referencing research sources. Each section includes learning opportunities through readings, videos, audio, and other relevant resources. Assessment activities with feedback also provide opportunities to check your learning, practice, and show how well you understand course content. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to gain proficiency in the seven competencies that will be covered in the final assessment. If you have no prior knowledge or experience, you can expect to spend 30-40 hours on the course content. You will demonstrate competency through a performance assessment. There is no prerequisite for this course and there is no specific technical knowledge needed.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner composes a written message with language appropriate for cross-cultural communication.*
- *The learner incorporates research to support a position or idea.*
- *The learner incorporates self-expression in written communication.*
- *The learner researches valid and reliable sources.*
- *The learner writes a message using an effective communication approach for a given situation.*
- *The learner writes a reference list.*
- *The learner writes in a professional manner for a given scenario.*

Introduction to Systems Thinking and Applications

Introduction to Systems Thinking and Applications provides learners with the skills required to engage in a holistic systems-based approach to analyzing complex problems and solutions. This course introduces the foundational concepts and principles of systems thinking and provides opportunities to use a systems thinking approach to analyze and evaluate real-world case studies. The course will culminate with using systems thinking to develop a solution to an authentic complex problem. This course has no prerequisites, but general education math (C955 or C957) is preferred. Because the course is

self-paced, learners may move through the material as quickly or as slowly as needed, with the goal of demonstrating proficiency in the five competencies covered in the final assessment. If learners have no prior knowledge of this material, they can expect to spend 30 to 40 hours on the course content.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner analyzes complex problems and solutions using a systems thinking methodology.*
- *The learner applies the basic principles and foundational theory of systems thinking to a scenario.*
- *The learner designs a solution to a complex problem using systems thinking.*

Applied Probability and Statistics

Applied Probability and Statistics is designed to help students develop competence in the fundamental concepts of basic statistics including: introductory algebra and graphing; descriptive statistics; regression and correlation; and probability. Statistical data and probability are often used in everyday life, science, business, information technology, and educational settings to make informed decisions about the validity of studies and the effect of data on decisions. This course discusses what constitutes sound research design and how to appropriately model phenomena using statistical data. Additionally, the content covers simple probability calculations, based on events that occur in the business and IT industries. No prerequisites are required for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate applies principles and methods of probability-based mathematics to explain and solve problems.*
- *The graduate applies the operations, processes, and procedures of basic algebra to evaluate quantitative expressions, and to solve equations and inequalities.*
- *The graduate applies the operations, processes, and procedures of fractions, decimals, and percentages to evaluate quantitative expressions.*
- *The graduate evaluates categorical and quantitative data pertaining to a single variable using appropriate graphical displays and numerical measures.*
- *The graduate evaluates the relationship between two quantitative variables through correlation and regression.*
- *The graduate evaluates the relationship between two variables through interpretation of visual displays and numerical measures.*

American Politics and the US Constitution

American Politics and the U.S. Constitution examines the evolution of representative government in the United States and the changing interpretations of the civil rights and civil liberties protected by the Constitution. This course will give candidates an understanding of the powers of the branches of the federal government, the continual tensions inherent in a federal system, the shifting relationship between state and federal governments, and the interactions between elected officials and the ever-changing electorate. This course will focus on such topics as the role of a free press in a democracy, the impact of changing demographics on American politics, and the debates over and expansion of civil rights. Upon completion of the course, candidates should be able to explain the basic functions of the federal government, describe the forces that shape American policy and politics, and be better prepared to participate in America’s civic institutions. This course has no prerequisite.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate describes the influence of competing political ideologies on the development of the United States government.*
- *The graduate examines the influence of political parties, citizens, and non-governmental organizations on elections and other political processes inside a participatory democracy.*
- *The graduate examines the influence of the media, public opinion, and political discourse on American democracy.*
- *The graduate examines the struggle to balance individual liberty, public order, and state’s rights.*

- *The graduate explains how the structure and powers of the United States government interact to form public policy.*

Applied Algebra

Applied Algebra is designed to help you develop competence in working with functions, the algebra of functions, and using some applied properties of functions. You will start learning about how we can apply different kinds of functions to relevant, real-life examples. From there, the algebra of several families of functions will be explored, including linear, polynomial, exponential, and logistic functions. You will also learn about relevant, applicable mathematical properties of each family of functions, including rate of change, concavity, maximizing/minimizing, and asymptotes. These properties will be used to solve problems related to your major and make sense of everyday living problems. Students should complete Applied Probability and Statistics or its equivalent prior to engaging in Applied Algebra.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner analyzes graphical depictions of real-world situations using functional properties.*
- *The learner applies exponential functions and their properties to real-world problems.*
- *The learner applies linear functions and their properties to real-world problems.*
- *The learner applies logistic functions and their properties to real-world problems.*
- *The learner applies polynomial functions and their properties to real-world problems.*
- *The learner interprets the real-world meaning of various functions based on notation, graphical representations, and data representations.*
- *The learner verifies the validity of a given model.*

Natural Science Lab

This course provides students an introduction to using the scientific method and engaging in scientific research to reach conclusions about the natural world. Students will design and carry out an experiment in the natural sciences to investigate a hypothesis by gathering quantitative data. They will also research a specific topic in the natural sciences using academic sources and draw conclusions from their findings.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate accurately executes the process of scientific inquiry through experimentation in the natural world.*
- *The graduate draws conclusions based on academic research and scientific inquiry.*
- *The graduate evaluates academic sources for their credibility and relevance to a chosen research topic on a natural world phenomenon.*

Global Arts and Humanities

This is a Global Arts and Humanities course that contains three modules with corresponding lessons. This course is an invitation to see the world through the humanities, examine the humanities during the Information Age, and explore the global origins of music—essentially questioning what makes us human, and how people are connected across culture and time. Each module includes learning opportunities through readings, videos, audio, and other relevant resources. Assessment activities with feedback also provide opportunities to practice and check learning. With no prior knowledge or experience, a learner can expect to spend 30-40 hours on the course content.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner analyzes diverse voices, ideas, perspectives, and cultural interactions through the lens of the humanities.*
- *The learner analyzes how music shapes and is shaped by diverse cultures and perspectives.*
- *The learner analyzes the humanities during the Information Age.*

Business of IT

Business of IT - Applications

Business of IT - Applications examines Information Technology Infrastructure Library (ITIL®) terminology, structure, policies, and concepts. Focusing on the management of information technology (IT) infrastructure, development, and operations, learners will explore the core principles of ITIL practices for service management to prepare them for careers as IT professionals, business managers, and business process owners. This course has no prerequisites.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner applies Information Technology Infrastructure Library (ITIL) concepts, core components, principles, and models of service management.*
- *The learner applies the Information Technology Infrastructure Library (ITIL) six activities of the service value chain.*

Information Technology Management

Project Management

Project Management introduces students to the essential concepts of project management and the role of the project manager. Students learn to develop a project management plan across all project management standardized phases. Although the course takes into consideration the content areas of the Certified Associate in Project Management (CAPM) exam, this revised version of the course asks students to deliver performance assessments; it does not directly ask students to practice in the same modality as the objective CAPM exam. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner analyzes the scope, schedule, and cost management portions of a project management plan.*
- *The learner applies the essential concepts, processes, and roles of project management and project integration.*
- *The learner develops a project management plan according to best practices.*

Information Technology Management and Leadership

Information Technology Management and Leadership addresses the technical and human elements of managing technology within an organization. A technology leader must be able to identify the components of a technology infrastructure, including all of the technologies used within an organization and how they relate to one another. This is crucial for building effective technology solutions, improving efficiency and processes, and knowing how to identify and resolve technical problems. Equipped with this fundamental skill, students in the course will analyze a scenario to create a technology management strategy for an organization. This course considers the ethical responsibilities of leadership and management and the appropriate use of technological solutions within an organization. The course also provides opportunities for students to develop their own leadership strategy, an essential element of effectively influencing and organizing the people who will carry out technology strategies at the ground level. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner analyzes the technology infrastructure of an organization.*
- *The learner develops an ethical IT management strategy.*
- *The learner develops an ethical leadership style and approach to managing human resources.*

Technical Communication

Technical Communication teaches IT managers how to convey complex information clearly and effectively to diverse audiences, whether technical or nontechnical. The course covers skills in writing, presentation, and visual communication, enabling managers to create documentation, reports, and presentations that are precise and accessible. Additionally, it emphasizes audience analysis, which helps managers tailor their messages to stakeholders, enhancing project understanding and decision-making across teams. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*

- *The learner conducts an audience analysis to plan communication strategies.*
- *The learner creates written communication to inform audiences of an IT issue.*
- *The learner delivers a presentation regarding information technology issues.*
- *The learner visualizes data and information to meet audience needs.*

Technology Governance

Technology Governance equips students with strategic frameworks and practices essential for effective governance in technology. The course covers the entire lifecycle of technology governance, including establishing governance structures and leadership techniques for enforcing these frameworks. Key themes include the evaluation of various technology governance models, the development of IT leadership skills, and the strategic integration of technology to meet business objectives. The course is aligned with COBIT, ITIL, CMMI, and ISO frameworks, emphasizing their application in real-world scenarios. Ethical considerations and social responsibility in technological governance are also explored.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner evaluates resource management strategies for technology-driven organizations.*
- *The learner evaluates risk mitigation strategies that meet regulatory and ethical compliance.*
- *The learner evaluates technology governance structures to ensure coordination with organizational goals.*

Cloud Foundations

Cloud Foundations introduces learners to real-world issues and practical solutions to cloud computing. This course covers the business value of cloud computing, examining cloud types, the steps to successful cloud adoption, and the effect cloud adoption has on IT service management, as well as the risks and consequences of implementing cloud solutions. This course prepares learners for the AWS Certified Practitioner certification exam. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner articulates the value proposition of cloud solutions in business scenarios.*
- *The learner defines cloud security and compliance.*
- *The learner determines the best-fit solution for a project based on the cost and support structures.*
- *The learner identifies cloud technology solutions in IaaS, PaaS, and SaaS models.*

Computer Science

Practical Applications of Prompt

The Practical Applications of Prompt course introduces learners to generative artificial intelligence (AI). This course aims to allow learners to gain skills for writing effective prompts and develop more effective conversations with artificial intelligence. Practical Applications of Prompt will lead learners to explore why prompt engineering is necessary. The course also aims to help learners, regardless of background, increase prompt fluency, which is fluency in using prompt effectively. The course teaches learners how to create effective prompts to elicit information with consideration of scope, specificity, and context; additionally, it teaches learners to evaluate the medium of the prompt and adjust prompts to output relevant results. The last section of the course focuses on ways to evaluate the efficacy of prompts and improve the depth and quality of analytical investigations. This approach prepares students to navigate the complexities of working with generative AI and use these skills effectively throughout their careers.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *Learners create effective prompts with the consideration of scope, specificity, and context to elicit targeted information.*
- *Learners evaluate the efficacy of writing different prompts on research outcomes and improve the depth and quality of their analytical investigations.*
- *Learners evaluate the images, texts, and sound of the prompt and adjust prompts to output relevant results.*
- *Learners explain why prompt engineering is necessary.*

Operating Systems

Linux Foundations

Linux Foundations prepares learners for the LPI Linux Essentials certification, and is an introduction to Linux as an operating system as well as an introduction to open-source concepts and the basics of the Linux command line. Learners will gain skills in identifying the fundamentals of open-source software and to develop resources for data access and security.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner develops resources for data access and security.*
- *The learner identifies the fundamentals of open-source software.*

Business Core

Fundamentals of Spreadsheets and Data Presentations

Fundamentals of Spreadsheets and Data Presentations offers learners an overview of the use of spreadsheet functions and methods for presenting data within spreadsheets. Learners will have the opportunity to explore features and uses of MS Excel and apply the tools to situations they may encounter while studying in their program. They will also be introduced to real world uses and tools to collect, organize and present data.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner creates a presentation from a spreadsheet dataset.*
- *The learner performs common spreadsheet tasks requiring basic formatting, formulas, and functions.*
- *The learner prepares data for analysis.*

Web Development

Web Design Fundamentals

Web Design Fundamentals provides students with essential web development skills, guiding them through the creation of accessible, responsive, and interactive web pages. This course will enable students to gain hands-on experience in HTML, CSS, and foundational JavaScript. The course will also focus on teaching students how to structure content, apply styling, and add dynamic functionality to enhance user engagement. Emphasizing industry best practices, this course covers key aspects of web accessibility, focusing on WCAG compliance, along with core UX and UI principles to ensure usability for diverse audiences. By the end of the course, students will have a comprehensive toolkit for designing web pages that are not only visually compelling but also technically sound and adaptable to various devices and user needs. There are no prerequisites for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together,*
- *The learner applies CSS (Cascading Style Sheets) to style and design visually appealing web pages to enhance user experience.*
- *The learner constructs basic web pages using HTML to create structured, accessible content.*
- *The learner modifies basic JavaScript code to add interactive functionality to web pages.*

Network and Security

Network and Security - Foundations

Network and Security - Foundations introduces learners to the basic network systems and concepts related to networking technologies. Learners will gain skills in applying network security concepts for business continuity, data access, and confidentiality, and in identifying solutions for compliance with security guidance.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner applies network security concepts for business continuity, data access, and confidentiality.*
- *The learner identifies basic network systems and concepts related to networking technologies.*
- *The learner identifies solutions for compliance with security guidance.*

Cloud Applications

Cloud Applications prepares learners for the CompTIA Cloud+ certification exam. Learners will gain skills in designing cloud infrastructure and services and in recommending cloud security solutions, policies, and procedures. The course will also introduce skills in deploying cloud solutions for storage, networking, and security, and in managing cloud operations with processes, procedures, and improvements. Learners will also gain skills in troubleshooting cloud services issues in networking, security, and performance.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner deploys cloud solutions for storage, networking, and security.*
- *The learner designs cloud infrastructure and services.*
- *The learner manages cloud operations with processes, procedures, and improvements.*
- *The learner recommends cloud security solutions, policies, and procedures.*
- *The learner troubleshoots cloud services issues in networking, security, and performance.*

Network and Security - Applications

Network and Security - Applications prepares learners for the CompTIA Security+ certification exam. The course introduces learners to skills in identifying threats, attacks, and vulnerabilities to organizational security. The learner will also gain skills in designing security solutions for enterprise infrastructures and architectures, as well as in implementing security solutions across hardware, applications, and network services. Learners will be able to execute operations and incident response with tools, policies, forensics, and mitigation techniques, and to analyze information security controls, governance, risk, and compliance.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner analyzes information security controls, governance, risk, and compliance.*
- *The learner designs security solutions for enterprise infrastructures and architectures.*
- *The learner executes operations and incident response with tools, policies, forensics, and mitigation techniques.*
- *The learner identifies threats, attacks, and vulnerabilities to organizational security.*
- *The learner implements security solutions across hardware, applications, and network services.*

Data Management

Data Management - Foundations

Data Management Foundations offers an introduction in creating conceptual, logical and physical data models. Students gain skills in creating databases and tables in SQL-enabled database management systems, as well as skills in normalizing databases. No prerequisites are required for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner defines primary and foreign keys in data normalization.*
- *The learner determines how to run queries for creation and manipulation of data in relational databases.*
- *The learner explains attributes of databases, database tables, and structured and associated query language (SQL) commands.*

Data Management - Applications

Data Management - Applications covers conceptual data modeling and introduces MySQL. Students will learn how to create simple to complex SELECT queries, including subqueries and joins, and how to use SQL to update and delete data. Topics covered in this course include exposure to MySQL; creating and modifying databases, tables, views, foreign keys and primary keys (FKs and PKs), and indexes; populating tables; and developing simple Select-From-Where (SFW) queries to complex 3+ table join queries. The following course is a prerequisite: Data Management - Foundations.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course*

plan together.

- *The learner creates DML statements that insert, update, and delete data in data tables.*
- *The learner implements joins and aggregate functions in SQL queries.*
- *The learner queries database tables and views with SQL code.*
- *The learner recommends databases and database management systems to meet organizational needs.*

Networks

Networks

Networks introduces skills in configuring networking components and a network infrastructure. Learners will gain skills in optimizing network operations for availability, performance, and security, and in troubleshooting network issues. The course prepares learners for the CompTIA Network+ certification exam. Network and Security - Foundations is a prerequisite for this course.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner configures a network infrastructure.*
- *The learner configures networking components.*
- *The learner implements network security techniques.*
- *The learner optimizes network operations for availability, performance, and security.*
- *The learner troubleshoots network issues.*

Networking

Python for IT Automation

Python for IT Automation covers the fundamentals of the Python language and its features to control program flow, inform decisions, and automate IT tasks and processes. The course emphasizes a systematic approach to solving problems and the application of programming logic to administer secure, scalable, and resilient IT networks and systems.

This course covers the following competencies:

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The learner applies Python principles and syntax to manage variables, data structures, and operators and to perform IT tasks.*
- *The learner creates Python scripts using control structures to automate system tasks.*
- *The learner integrates Python scripts, modules, packages, and libraries to automate networking tasks and processes.*

Accessibility and Accommodations

Western Governors University (WGU) is committed to providing equal access to its academic programs to all qualified students. WGU's Student Disability Services department supports this mission by providing support, resources, advocacy, collaboration, and academic accommodations in accordance with federal and state statutes and regulations to WGU students and prospective students. Potential and current students needing to request accommodation(s) are encouraged to contact Student Disability Services to initiate the request. To initiate the accommodation process, all potential and current WGU students must complete the secure online Accommodation Request Form located at' *https://www.wgu.edu/wgu/ada_form*. Potential and current students can reach the Student Disability Services team Monday through Friday 8:00 a.m. to 5:00 p.m. MT at 1-877- 435-7948 x5922 or at *sds@wgu.edu*. Additional information on accommodations can be found in the student handbook Accommodations for Students with Disabilities policy.

Need More Information? WGU Student Services

Student Support Services team members also assist with unresolved concerns to find equitable resolutions. To contact the Student Support Services team, please feel free to call 877-435-7948 or e-mail *studentservices@wgu.edu*. We are available Monday through Friday from 6:00 a.m. to 10:00 p.m., and Saturday and Sunday, 10:00 a.m. to 7:00 p.m, mountain standard time.