At-a-Glance Degree Tracks

General Studies

College Algebra & Problem Solving - MAT 117
English Composition - ENG 101
English Composition: Research & Writing - ENG 102
Human Origins - ASM 246
Information Technology and Problem Solving - CIS 105
Introduction to Health and Wellness - EXW 100
Introduction to Human Communication - COM 100
Introduction to Sociology - SOC 101
Introduction to Solar Systems Astronomy - AST 111
Precalculus - MAT 170
Programming for Everyone: Introduction to Programming - CSE 110
Western Civilization: Ancient and Medieval Europe - HST 102

Recommended General Studies courses

Business

Brief Calculus: Calculus for Business and Economics - MAT 210
College Algebra & Problem Solving - MAT 117
English Composition - ENG 101
English Composition: Research & Writing - ENG 102
Information Technology and Problem Solving - CIS 105
Introduction to Human Communication - COM 100
Macroeconomic Principles - ECN 211
Microeconomic Principles - ECN 212
At-a-Glance Degree Tracks

Engineering

- Calculus for Engineers I: Calculus with Analytic Geometry for Science & Engineering - MAT 265
- College Algebra & Problem Solving - MAT 117
- English Composition - ENG 101
- English Composition: Research & Writing - ENG 102
- General Chemistry for Engineers - CHM 114
- Introduction to Engineering: Imagine. Design. Engineer! - FSE 100
- Programming for Everyone: Introduction to Programming - CSE 110
**At-a-Glance Areas of Interest**

### Computing & Mathematics
- Programming for Everyone: Introduction to Programming - CSE 110
- College Algebra & Problem Solving - MAT 117
- Precalculus - MAT 170
- Brief Calculus: Calculus for Business and Economics - MAT 210
- Calculus for Engineers I: Calculus with Analytic Geometry for Science & Engineering - MAT 265
- Information Technology and Problem Solving - CIS 105

### Engineering & Technology
- General Chemistry for Engineers - CHM 114
- Introduction to Engineering: Imagine. Design. Engineer! - FSE 100

### Health & Wellness
- Introduction to Health and Wellness - EXW 100

### Humanities
- English Composition - ENG 101
- English Composition: Research & Writing - ENG 102
- Western Civilization: Ancient and Medieval Europe - HST 102
OVERVIEW

This online math course teaches the fundamentals of algebra and will prepare you for calculus courses as you progress toward your college degree.

ABOUT THE COURSE

This online college algebra course equips you with the skills to effectively solve problems using algebraic reasoning. What sets this course apart from a standard algebra course is its strong emphasis on the techniques that are used to solve problems. The goal is not to simply teach you mathematical forms but to help you understand the “whys” behind how you are solving problems. Throughout this course, you will be able to participate in discussions with other students and the professor to help build your conceptual understanding of algebra.

In this course, you will learn about systems of linear equations, rational functions, quadratic functions, logarithmic functions, general polynomial functions, and exponential functions.

Additionally, our college algebra online course uses cutting-edge adaptive technology (the ALEKS learning system). ALEKS is a personalized math tutor that will help you learn each of the skills in our course at your own pace, making it fun to learn algebra online. Our goal is to reduce your “math anxiety” and ensure you walk away feeling confident about math!

This course satisfies 3 credit hours toward the Mathematical Studies (MA) General Studies requirement at Arizona State University.
At-a-Glance Areas of Interest

Science
Introduction to Solar Systems Astronomy - AST 111

Social & Behavioral Sciences
Human Origins - ASM 246
Introduction to Human Communication - COM 100
Macroeconomic Principles - ECN 211
Microeconomic Principles - ECN 212
Introduction to Sociology - SOC 101
CIS 105

Computer Applications and Information Technology (CS)

OVERVIEW

This course addresses how businesses, through competitive strategy, are keeping pace in a rapidly changing, increasingly digital world.

ABOUT THE COURSE

This course is an introductory course with a dual focus: one focus on organizations and another focus on the individuals who work for them. At the individual level, we will examine how business decision making can be improved when supporting technologies like spreadsheets are leveraged. From the organizational perspective, we will cover strategic analysis frameworks and business strategies that can be fine-tuned for competition in an increasingly digitally transformed world.

Humans are inherently limited in how they might approach problem solving because of the cognitive biases we all bring to decision situations. Understanding these biases and how to confront them using the spreadsheet modeling knowledge gained in this class will change the way you face and solve problems. We will cover practical decisions you will deal with in many different personal and professional business settings. You will build models in spreadsheet software that serve to help you analyze problem situations in a completely new light.

You will learn:

• Leverage a dual focus approach to study information systems from both tactical and organizational viewpoints in order to advance a broad understanding of digital transformation’s impact on people, business processes and organizational strategy
• Understand the limitations cognitive biases can inflict on individuals
• Describe industry competition in an age of digital transformation using frameworks
• Debate how well digitally transforming industry competitors are positioned for sustained advantage
• Leverage this first course in business to understand the exciting career paths available now

This course satisfies 3 credit hours toward the Computer Science (CS) General Studies requirement at Arizona State University.
COM 100

Introduction to Human Communication (SB)

OVERVIEW

In this online communication course, you will learn the basics of effective human communication, which can change the way you interact with others and the world.

ABOUT THE COURSE

This course is designed to introduce you to the basic concepts of human communication, processes, and environments. This course surveys communication topics related to culture, identity, organizations, and relationships. By the end of this course, you should have a fuller understanding of appropriate and effective communication based on your knowledge of theoretical concepts and their application.

You will learn:

- To define and describe the complex nature of communication
- To identify and describe the various contexts of communication study, including interpersonal, small group, organizations, public, and mass communication
- To explain the features of communication common to all contexts, including verbal and nonverbal
- To connect theoretical concepts of communication to everyday experiences
- To define key terms used by communication researchers and practitioners
- To describe the relationships between the discipline of communication and other academic areas of study

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University
OVERVIEW

Learn the basic principles of American democracy, how civic engagement has shaped the United States, and how you can become an active and engaged member of your own community.

ABOUT THE COURSE

Have you ever read the news or overheard a conversation about politics and felt helpless? You are not alone! Many people ask questions like: Does my vote matter? How do federal policies affect me? How can I make a difference? American Democracy is defined by its people participating, voicing their opinion, and making a difference.

In this course, you will learn about civic engagement and how people like you shape the world. You will also gain insight into how you can become an active and engaged member of your own community. You will interview public service leaders, investigate local issues, and form the what, why, and how of civic engagement, which you will use to create a civic action portfolio.

You will learn:

- The basic principles of American Democracy and how they apply today
- About civic engagement
- How civic engagement has shaped the United States
- To connect theoretical concepts of communication to everyday experiences
- How citizenship has changed over time through civic engagement
- How to identify pathways to public service

This course was designed through a unique partnership with Service Year Alliance and Arizona State University. This course is ideal for those looking to identify pathways to civic action, such as Corps members working in their year of service, individuals who would like to get more involved in their neighborhoods and cities, or those interested in creating change in their community.

This course satisfies 3 credit hours at Arizona State University.
Precalculus

OVERVIEW

This online precalculus course will teach you the skills required for success in future calculus studies.

ABOUT THE COURSE

In this college-level Precalculus course, you will prepare for calculus by focusing on quantitative reasoning and functions. You'll develop the skills to describe the behavior and properties of linear, exponential, logarithmic, polynomial, rational, and trigonometric functions.

This course tailors content and personalizes the learning experience around your skill level, allowing you to achieve mastery in a certain concept before moving on to the next. Utilizing the ALEKS learning system, students in this personalized, self-paced course will be instructed on the topics they are most ready to learn. Individualized coaching is also provided as you move through each new topic.

Before taking this course, you should already have a strong understanding of algebraic skills such as factoring, basic equation solving, and the rules of exponents and radicals. These algebraic skills can be mastered though the college algebra course.

This course is worth 3 credit hours toward the Mathematical Studies (MA) General Studies requirement at Arizona State University.
OVERVIEW

In this college-level brief calculus course, you will study the differential and integral calculus of elementary functions with applications. This course is ideal for students interested in business, economics, or social sciences.

ABOUT THE COURSE

Topics covered in this course include limits and derivatives of algebraic, logarithmic, and exponential functions; the definite integral; analysis of graphs; optimization; applications of the derivative; and more.

Content in this course is adaptive, allowing you to achieve mastery in a certain concept before moving on to the next. This course uses Gradarius, a calculus learning platform that personalizes your learning based on the topics you already know and the topics you still need to learn. You will also have access to individualized coaching as you move through each topic in this course.

You will learn:

- The meaning and computation of average rates of change and applications
- The meaning and computation of instantaneous rates of change and applications
- Marginal analysis
- The meaning and computation of accumulation and applications
- Techniques to solve optimization problems and applications

This course is worth 3 credit hours toward the Mathematical Studies (MA) General Studies requirement at Arizona State University.
OVERVIEW

In this online programming course, you will learn how to solve problems using programs for the devices that are all around us.

ABOUT THE COURSE

Every day, computers and algorithms touch the lives of everyone around us in both mundane and profound ways. These algorithms are in the plants and distribution systems that bring you clean water and electricity, sensors that moderate the flow of traffic, in the tractors and combines that sow and harvest our food, and in the satellites that measure and predict the weather trends. If you are curious about what computers can do and how we instruct them to do those things - this course is for you. No prior programming experience is needed for this course.

In addition to exposure to programming, you will gain a powerful set of thinking and problem-solving skills that you can use in your daily life. Start taking advantage of the power of computers around us to make our world a better place.

- What a computer scientist does
- The basic operation and capabilities of computers
- Algorithmic problem-solving
- Debugging programs
- Automating basic processes using computers
- Writing basic programs using modern programming languages

This is a 3 credit hour course at Arizona State University (CSE 110 Principles of Programming) and satisfies the Computer/Statistics/Quantitative (CS) General Studies requirement. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring the credit.
OVERVIEW

In this college-level calculus course, you will study topics of differential and integral calculus, including limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. This course is ideal for students interested in engineering, mathematics, computer science, physics, chemistry, earth and atmospheric sciences, and life sciences.

ABOUT THE COURSE

Topics covered in this course include limits (including those involving infinity); derivatives and rates of change; continuity; applications of the derivative; linear approximation; accumulation; antidifferentiation; definite integrals; and more.

Content in this course is adaptive, allowing you to achieve mastery in a certain concept before moving on to the next. This course uses Gradarius, a calculus learning platform that personalizes your learning based on the topics you already know and the topics you still need to learn. You will also have access to individualized coaching as you move through each topic in this course.

You will learn:

• The meaning and computation of limits
• The meaning and determination of continuity
• The meaning and computation of average rates of change and applications
• The meaning and computation of instantaneous rates of change and applications
• The meaning and computation of accumulation and applications
• The meaning and computation of Riemann Sums and applications
• Techniques to solve optimization problems and applications

This course is worth 3 credit hours toward the Mathematical Studies (MA) General Studies requirement at Arizona State University.
OVERVIEW

In this online chemistry for engineers course, you'll learn how atoms and molecules act and interact to make the modern materials that underpin technology and solve engineering challenges.

ABOUT THE COURSE

Have you ever wondered what’s inside your mobile phone case? Why batteries aren’t lighter and have to be recharged? How different colors can be shown on your computer screen? Or why glass shatters when you hit it with a hammer? These, along with other questions of how atoms and molecules combine to make macroscopic materials with desired properties, are at the heart of countless challenges addressed by chemists and engineers every day.

This course is not a standard introductory chemistry course. In this course, you will learn by doing, and you will be helped along the way with instant visual and audio feedback. You will simultaneously learn the language of chemistry and how to think like a chemist by exploring the chemistry embedded in four key engineering challenges:

- Why don't we build everything out of glass?
- What are the fuels of the future?
- Can battery technology solve the energy crisis?
- How will modern materials shape tomorrow?

The course introduces general chemistry topics and explains directly how these concepts are related to engineering. You will develop the language and chemistry skills necessary to work as an engineer in a team with chemists.
OVERVIEW

In this online engineering course, you will discover how to become a true engineer by exploring the engineering design processes in a hands-on learning environment.

ABOUT THE COURSE

Do you ever think: “There has to be a better way!” Then engineering is for you! Engineering is for anyone with a passion for problem solving.

This course actively introduces you to skills and tools that engineers use to solve problems while teaching you to think like an engineer. You will learn to identify opportunities, imagine new solutions to problems, model your creations, make data-driven decisions, build prototypes, and showcase your ideas that will impact the world.

Taught by engineering professors and highlighting industry engineers in action, this course will equip you, as an engineer-in-training, with the skills necessary to compete in today's world of innovation.

This is a 2 credit hour course at Arizona State University (FSE 100 Introduction to Engineering). It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring the credit.
ABOUT THE COURSE (CONTINUED)

You will learn:

- To solve engineering challenges using tools from chemistry
- To apply molecular ideas to understanding the properties of materials and functionality of modern devices
- To predict chemical and physical properties from molecular or material structures
- To evaluate suitability of chemicals and materials for applications like batteries or fuel cells based on chemical and physical properties

*This course satisfies 4 credit hours toward the Natural Science - Quantitative (SQ) General Studies requirement at Arizona State University.*
OVERVIEW

In this online health and wellness course, you will learn current concepts in exercise, health, and wellness. You will also gain valuable insight into how to maintain a healthy lifestyle for yourself.

ABOUT THE COURSE

In this online health and wellness class, you will explore a wide variety of health-related topics, including:

- How to improve your personal fitness
- How to take a credible assessment of your personal health
- The dietary decisions you need to make to help build a healthy life
- How to achieve and maintain a healthy weight
- How to manage stress
- How to maintain proper sleep hygiene
- How to lower the risk of contracting an infectious disease
- Steps you can take to reduce the risk of chronic disease
- Attitudes and beliefs related to health

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University.
OVERVIEW

The purpose of this online English composition course is to help you improve your ability to communicate and to think critically through writing.

Why English Composition - ENG 101 Matters

The ability to clearly and effectively communicate through writing is an essential skill in today’s global economy. Whether drafting an important email to your boss or writing a white paper for your website, understanding how to confidently communicate your thoughts through writing will serve you throughout your career and lifetime.

About English Composition - ENG 101

This introductory writing class will give you the tools necessary for developing and expressing your thoughts to a wide range of audiences. Throughout this course, you will be asked to complete and reflect upon a variety of written projects and will reflect on each project as well. You can decide how you’d like to consume course materials to best fit your personal learning style: by watching videos, listening to audio, or reading text.

This is a 3 credit hour course at Arizona State University (ENG 101 First-Year Composition). It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring the credit.
OVERVIEW

This course will take you on an exploration of the beginnings and development of Western societies from the Ancient World through the Middle Ages.

ABOUT THE COURSE

This first year online history course will take you on a fascinating journey through the history of Europe and the Mediterranean from ancient times through 1500 AD. You will learn about a number of cultures and periods, including:

- Egypt and Mesopotamia
- Greece
- Rome
- Judaism
- The Byzantine Empire
- The Rise of Islam
- Medieval Europe

You will also learn:

- How to critically analyze the development and growth of people economically, socially, culturally, and politically
- The evolving social role that religion plays in European culture
- The changing political systems in Europe and how they impact Western society
- The evolving relations between Europe, the Mediterranean, and the larger world

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) and Historical Awareness (H) General Studies requirement for Arizona State University.
OVERVIEW

This course teaches you how to effectively execute a research-based writing project from conception to publication.

ABOUT THE COURSE

This online writing course will help you understand discourse and research writing with the goal of creating solutions to issues within your local community. What sets this course apart is that you won't be learning about subjects in an abstract sense; instead, you will identify local problems and research real solutions for these problems.

To achieve this, you will be equipped with the tools to:

- Create an action-oriented research question
- Make a proposal for your research project
- Perform primary and secondary research
- Design your research project for publication on the Web
- Construct a call to action based on your research

This course is so much more than “just a writing course.” It is a class that will simultaneously ignite your imagination for how you can improve the world around you and give you the tangible tools to see those improvements begin to take shape.

*This is a 3 credit hour course at Arizona State University (ENG 102 First-Year Composition). It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring the credit.*
OVERVIEW

This online astronomy course will take you on a fascinating journey through the world of modern solar systems.

ABOUT THE COURSE

Have you ever looked up at the night sky and marveled at the vastness and complexity of space? You are invited to take a deeper dive into the mind-blowing world of astronomy. At the end of this course, you will walk away with the knowledge to answer the following questions:

- Where did our solar system come from?
- How is our solar system structured?
- What makes up our solar system - what are its contents?
- What are exosolar planetary systems?
- What is the history of the field of astronomy?
- Why are the various properties of light important to astronomy?
- What are the various instruments used in astronomy and how are they used?

Throughout the course, you will also take a look at nearby stars and learn about the Lowell Observatory, the Challenger Space Center, the Discovery Channel Telescope, and Meteor Crater, the largest meteor impact site in the world. Additionally, you will take a virtual tour of the Lunar Exploration Museum and the home of the Mars Space Flight Facility where scientists are using spacecraft to explore the geology of Mars.

This course is packed with information and will greatly expand your understanding of our vast universe.

This course includes a lab and satisfies 4 credit hours toward the Natural Science - Quantitative (SQ) General Studies requirement at Arizona State University.
ABOUT THE COURSE

The course will take you on a fascinating journey through the scientific evidence for human evolution. Dr. Donald Johanson, the paleoanthropologist who found the famous skeleton “Lucy,” will guide you through an overview of the hominin fossil record as well as introduce you to evolutionary theory. Take advantage of this unprecedented opportunity to dive deeper into the world of paleoanthropological field research from Dr. Johanson’s perspective.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University.
ABOUT THE COURSE (CONTINUED)

- The final part of this course focuses on market distortions that are introduced by governments, such as taxes and tariffs, or those that result from the nature of the products produced or consumed.

You will learn:

- Consumer and producer theory
- The concepts of equilibrium and efficiency and the different types of markets where consumers and firms interact
- The concept of efficiency and how it relates to market structure
- How to analyze the effects of policies and other forms of market distortions

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University.
OVERVIEW

In this online microeconomics course, you will explore how decisions of consumers and business affect the prices of goods and services you consume, how goods and services are produced by firms, and how the production of goods and services benefit both consumers and producers.

ABOUT THE COURSE

This course introduces you to microeconomics, the field of economics that studies decision-making behaviors of consumers and firms when scarcity constrain their choices. The constrained decision-making principle is the primary foundation of modern economics and is the central concept around which this course is built.

Decisions are made in the face of constraints every day in the marketplace. Consumers make purchasing decisions based on their limited incomes, and business managers must take into account the presence of competitors in choosing the prices to charge for their products. In this course, you will explore how decisions and constraints determine the prices and quantities of goods and services produced, how goods and services are produced, and benefits to society from the production and consumption of goods and services.

The course is divided into four parts:

- In part I, you will gain an understanding of how consumers make decisions on the types and quantities of goods to purchase.
- In part II, you will learn how managers decide how much to produce, the price to set for their products, and the amounts and types of inputs to use to produce.
- In part III, the focus will be on the interaction between consumers and producers in different types of markets and the concepts of equilibrium and efficiency.
Macroeconomic Principles

OVERVIEW
Understand how the decisions of those around you impact your daily life, including the cost of everyday items and even how much you earn in your paycheck.

ABOUT THE COURSE
Macroeconomics is the study of the sum of all spending, income, and productive efforts. The economic outcomes that we experience are the result of our intricate dealings with other governments, businesses, and people, both locally and globally. This course will give you insight into how economists approach and measure these big issues and questions.

This first part of this course takes a look at the common household with a specific focus on how the members of a household choose their workloads and spending habits. You will also study how businesses, both large and small, make important economic decisions.

The second part of this course dives into policymaking and how these policies can either distort or enhance market outcomes. You will focus on five specific areas of economic policy:

- Free trade
- Research and development & innovation
- Fiscal and tax
- Inflation and monetary
- Unemployment and labor market policies

*This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University.*
OVERVIEW

This online sociology course enables you to pierce the surface layer of everyday life – the world of appearances – and thereby gain a deeper understanding of why people act the way they do in the presence of others. That deeper understanding will equip you to more effectively communicate with people in your professional and personal lives.

Why Introduction to Sociology - SOC 101 Matters

Sociology is the study of interaction and relationships between individual members of groups within society. It is about the social processes that unfold as individuals interact with one another. You will gain insight into how the specific characteristics of people involved in interactions impact the way that those social processes evolve. The insights you gain will enable you to more successfully navigate your personal and professional relationships.

About Introduction to Sociology - SOC 101

In this online sociology class, you will learn how individuals both shape and are shaped by their communities. You will learn how individuals both actively impact and are shaped by their communities, and you will explore the formation and persistence of societies that consist of diverse groups of people. You will also gain valuable insight into the dynamics of group relationships, including how to effectively interact with others within a group. Finally, you will learn how the study of sociology applies to your daily life as well as the most pressing social events of our time.

The topics you will study include:

- Society and culture
- Socialization amongst people
- Stratification and inequality within society Gender roles
- Deviance and social control
- Social problems and social change
- Significant social structures in the United States, including the education system, government, and family
SOC 101

About Introduction to Sociology - SOC 101 (CONTINUED)

You will learn:

- You will significantly improve your ability to communicate in both a professional and personal environment
- You will improve your ability to think critically and write effectively
- You will learn the basic ideas and theories of sociology
- You will gain deeper empathy for people who are different than you
- You will learn how sociology applies to your everyday life

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University.