

# ACADEMY BY DESIGN





# ACADEMY BY DESIGN

EMPATHY, LEADERSHIP, MISSION

God is a designer. In his work, we see a plan and process that nurtures all of creation toward its designed purpose. God operates in this way naturally, and we are created in His image.

As they look at current trends in employment, educators, business leaders, and career consultants project that, in the next ten years, 200 million new careers will arise—careers for which students of today must be prepared. In addition to understanding the arc of God’s plan for redemption, these students will need to navigate the complex interaction of people, ideas, technology, and ethics in order to participate in opportunities that arise in the future. We recognize that we now have the potential to prepare students for these roles so they can be used significantly as they serve God to further His kingdom and glory.

Starting with empathy and the knowledge that God cares deeply for humanity and the rest of his creation, students in this program are trained to identify real problems, collaborate with peers, design solutions, and communicate effectively. They practice these skills in the presence of teachers and professional mentors invested in raising up a group of leaders able to effect change in the world. Ultimately, these students leave Wheaton Academy prepared to engage a world filled with people and problems in need of redemption.

According to the consulting firm McKinsey Global Institute, by 2030 there will be a surge of over 200 million new careers (Manyika et al., 2017). These new roles will no longer ask learners to simply collect and process data but, instead, to apply expertise, interact with stakeholders, and navigate complex relationships. Students will be called on to use their uniquely human skills of collaboration, communication, empathy, and divergent thinking as they move into an uncertain but exciting future.

*Designed To Learn*, Lindsay Portnoy

# OUTCOMES

Although Wheaton Academy provides students with problem-based and design-oriented training throughout the current curriculum, this program offers additional opportunities in key areas with focused learning on problems that appeal to individual students. By the end of four years at Wheaton Academy, students in this track will have

- ▶ practiced empathy
- ▶ chosen coursework to support their unique interests
- ▶ addressed real-world problems as part of a collaborative team
- ▶ learned to listen and respond to consistent feedback from mentors such as business professionals and academics
- ▶ leveraged intrinsic motivation and technical training into innovative design solutions

# EXAMPLES

Below are potential focus areas and the kinds of courses and experiences that could comprise a student's schedule. These examples demonstrate the possibilities for rich and varied electives. Each student will have a unique schedule created in collaboration with program instructors.



## ▶ Courses at Wheaton Academy

Orchestra  
AP Music Theory  
Sculpture  
Story and Animation Design  
Video Production

## ▶ Online or Alternative Courses

Cinematography  
Film/Video Aesthetics  
Music Literature  
Improvisational Acting

## ▶ Internships

NYCH Gallery  
Gravity Studios

## ▶ Potential Senior Year Project

Creating a film/music/sculpture presentation that showcases the art of local high school students while providing workshops and recording opportunities for at-risk and underserved youth in the community



## ▶ Courses at Wheaton Academy

AP Literature and Composition  
Intro to Sociology  
Who Lives, Who Dies, Who Tells Your Story? The Ethics of Science & Storytelling  
Writers Workshop

## ▶ Online or Alternative Courses

Introduction to Anthropology  
History of Terrorism  
Asian Thought

## ▶ Internships

Cantigny: 1st Div Museum  
StoryCorps

## ▶ Potential Senior Year Project

With the specific goal of creating a database of recordings of Filipino expats telling their stories, tracing Filipino dispersion and life experiences before and after violent interactions with Islamic terrorist groups



## ▶ Courses at Wheaton Academy

Business Principles  
Marketing & Communication  
IncubatorEdu: Entrepreneurship & Innovation  
Intro to Programming

## ▶ Online or Alternative Courses

Electronic Business/ Commerce  
Legal Environment of Business  
Diversity in Business

## ▶ Internships

Molitor Financial Group  
Chicago IP Law

## ▶ Potential Senior Year Project

Building a mutually beneficial communication platform for local businesses to interface with larger corporations in a promotional, knowledge-sharing relationship where local businesses can access educational materials and potential funding from larger businesses while the larger businesses gain access to potential talent, ideas, and markets

# FOUR-YEAR SCHEDULE

This program allows students to structure their junior and senior years around collaborative projects and community engagement. While taking courses in the main Wheaton Academy curriculum during freshman year, students explore areas of possible focus, and instructors evaluate their fit in the program. As they progress through high school, students gradually have freedom to customize their education around a field of interest that culminates in several year-long projects.

## FRESHMAN YEAR

At the beginning of freshman year, students opt into the program but do not take a drastically different course load. Instead, they take a few modified courses and a required Winterim course in addition to meeting with program advisors throughout the year. These touchpoints give students and teachers opportunities to assess fit in the program. At the end of freshman year, they apply to be part of the project-based sophomore year courses.

### Freshman Year: Fall

Summer Academy: Health

1. Foundations of Faith
2. Math Requirement
3. English I
4. Physics
5. Intro to Historical Inquiry
6. Elective
7. Elective

Winterim: Design Thinking - Half Day (Required)

### Freshman Year: Spring

1. Foundations of Faith
2. Math Requirement
3. English I
4. Physics
5. Intro to Media Arts
6. Elective
7. Elective

## SOPHOMORE YEAR

In sophomore year students are introduced to semester projects: an individual project followed by a team one. These projects, as well as a couple courses tailored to students in the program, provide additional information on a student's fit in the program. At the end of sophomore year, students will have another opportunity to opt out of the program without a significant disruption of the usual course progression.

### Sophomore Year: Fall

Summer Academy: Chemistry (recommended)

1. AP Seminar (recommended) or English II
2. History Requirement/AP Art History
3. Math Requirement
4. Science Requirement
5. Spiritual Formation
6. Elective
7. Semester Individual Project

### Sophomore Year: Spring

1. AP Seminar (recommended) or English II
2. History Requirement/AP Art History
3. Math Requirement
4. Science Requirement
5. Elective
6. Elective
7. Semester Team Project

It's quite striking that, almost without exception, the great contributors to civilization were educated as apprentices, not as note-takers.

*Most Likely to Succeed: Preparing Our Kids for the Innovation Era*, Tony Wagner and Ted Dintersmith

## JUNIOR YEAR

During junior year students dedicate more time to project work, along with some alternative courses specific to the program. Students begin to integrate skills and concepts from previous courses as they focus on identification of problems and collaborative design.

### Junior Year: Fall

Summer Academy: Advanced Topics and Health

1. United States History/AP U.S. History
2. Statistics and Data Science
3. Bible Requirement
4. Elective
5. ABD Course
6. Junior Year Project (AP Research Possible)
7. Junior Year Project

Winterim: Internship (recommended)

### Junior Year: Spring

1. United States History/AP U.S. History
2. Statistics and Data Science
3. Bible Requirement
4. Elective
5. ABD Course
6. Elective
7. Junior Project

## SENIOR YEAR

In this final year in the program, students have most of their day open for project work, flexible class offerings (including courses for college credit), and internships. At this point, students are building an educational experience around the problems they have identified and are seeking to solve.

### Senior Year: Fall

Summer Academy: Internship (recommended)

1. Bible Elective
2. U.S. Government and Current Issues/  
Comparative Government
3. Elective
4. Elective
5. Elective
6. Senior Year Project
7. Senior Year Project

Winterim: Internship (recommended)

### Senior Year: Spring

1. The Ethics of Science and Storytelling
2. History Elective
3. Elective
4. Elective
5. Elective
6. Senior Year Project
7. Senior Year Project

# PROJECTS

- ▶ **During Sophomore, Junior, and Senior year, students will spend time working on semester- and year-long projects that allow them to apply classroom knowledge and design thinking skills to real-world problems.**

During sophomore, junior, and senior years, students will work on semester- and year-long projects. Students will devote significant time to these projects that serve as opportunities to apply Design Thinking skills, connect classroom learning to community problems, practice empathy and collaboration, apply content and skills learned in other courses, and produce artifacts that demonstrate each student's growth in the program. While these projects are not designed to be a primary means of content delivery, they are effective vehicles for mentorship, constructive feedback, independent research, and iterative design.

## SOPHOMORE YEAR

**Sophomore Individual Project.** The first project is an individual project during the fall semester of sophomore year. Students identify an area of interest, define a problem or opportunity in that area, conduct background research (using skills taught in AP Seminar), design or suggest an initial response to the problem, elicit stakeholder feedback, and reflect on the viability of the design. Because the time frame for this project is short, the experience is driven by formative feedback and with the understanding that a final viable solution may not be reached by the end of the semester.

**Sophomore Team Project.** The individual project leads into the team project. Based on demonstrated skills and interests from the individual project, students are placed into collaborative teams. On these teams, students can choose to dive deeper and elaborate on any of the individual projects from the fall or can choose to repeat the fall process in a new area. Feedback is still crucial, but a new emphasis is placed on teamwork and collaboration. Students present their work to a panel at the end of the semester.

## JUNIOR YEAR

**Junior Year Project.** The scope of collaborative projects, as well as the time dedicated to them, expands with junior year. Either by taking AP Research or by joining a collaborative team, students apply their individual interests to service in an area of need. These areas can be identified in a variety of ways--by surveying the local community or encountering issues firsthand in an internship. In all cases, teachers and mentors continue to provide feedback and guidance on student work, but the burden of completing the project well shifts toward the student.

## SENIOR YEAR

**Senior Year Project.** By senior year, students have demonstrated their ability to finish projects well and are awarded substantial amounts of flexible time to work on an area of interest. Whether addressing work on a musical, a series of education apps, a comprehensive survey of local history, or a remotely accessible home automation system, these projects direct four years of education and practice toward a single problem or need. These projects are the program's capstone experience, involving consistent interaction with stakeholders, iterative designs, reflection, and community presentations.

# ELECTIVES

- ▶ **In Elective courses, students are encouraged to increase the skills necessary to complete their projects.**

Electives, chosen to develop each student's interests, enhance their depth of understanding and encourage specialization in team projects. Intentionally driven individual pursuits combine to produce dynamic team interactions as well as highly developed skill profiles. Focus electives can be courses offered through Wheaton Academy, but may also extend to online or alternative courses.

# ABD COURSES

- ▶ **To collaborate well, students will take courses that focus on increasing skills in Design Thinking.**

Significant content and skills needed to be successful in the program are covered in existing courses. Some courses—Communication, Graphic Design, and Statistics and Data Science—are so well suited to the program that every student is strongly encouraged to take them. In addition, new ABD courses will be added to Wheaton Academy's curriculum to introduce students to the skills, habits, and mindsets of Design Thinking.

# COLLEGE & CAREER READINESS

Recent educational research has highlighted a handful of character traits that drive student success in a variety of fields. Perseverance, social intelligence, self-control, gratitude, passion, and hope help students not only to achieve academically, but also to become effective, empathetic people in general. Studies suggest that, far from being fixed attributes in students, these traits can be developed and strengthened through deliberate training, and Wheaton Academy has incorporated a focus on these college readiness traits throughout the curriculum.

This program extends that focus by creating space in the curriculum for students to identify an area of passion, work as a team, focus through distractions, overcome challenges, appreciate the contributions of mentors, and present solutions that speak to the true hope that comes with God and His people at work in the world. By developing these traits along with additional training in communication, design, and technical skills, students are developing not only their college readiness but also their ability to put future learning into redemptive practice on campus or the job site.

# STANDARDS AND EVALUATION

Because the program gives students choice to design in their area of passion, students may experience educational standards and evaluation differently than they have in past courses.

**Standards.** Instead of existing primarily in individual disciplines, content standards are integrated in courses that are authentically cross-curricular. The standards remain the same. However, the framing of those standards in the curriculum changes, and new courses are proposed to cover existing standards in different ways.

**Evaluation.** To reflect the various directions in which students can direct their projects, evaluation in this program emphasizes feedback above grades. Grades are still awarded on major checkpoint assignments and final presentations, but much of the work done in the course will receive feedback instead of a grade. Feedback encourages student growth with or without grades attached; grades without feedback do not.

# GETTING INTO THE PROGRAM

We firmly believe that anyone who is admitted to Wheaton Academy can be part of Academy by Design, provided they meet the following criteria:

- ▶ Students will fill out an ABD application that will enable us to know them in greater depth before they arrive on campus. This understanding will assist in the creation of teams equipped with a diverse skillset and common interests, enabling the best possible chemistry. It will also assess the following:
  - the reasons they want to invest in a unique program like Academy by Design.
  - the ways they resonate with the key principles of Academy by Design.
  - the ways they work with others.
  - the ways they show a willingness to have an open mind and think “outside the box.”
- ▶ Students will submit background letters from past teachers and mentors. These letters are not for the sole purpose of gaining admittance to Academy by Design, but also for helping us make better decisions for team formation.
- ▶ Parents will also be asked to participate in the application process so that they are aware of the level of commitment to the program, especially in terms of taking students out of class for family trips, etc.

**Juniors** who have been on the traditional track at Wheaton Academy may try to transition into the flex track for their junior year but are not guaranteed admittance.

- ▶ Since they have missed two years of Design Thinking development, they will need to take a summer school class that will introduce them to these foundational concepts. Additionally, students will need to complete a summer project so that they can further hone these skills. The quality and depth of the summer project will factor into program admittance.
- ▶ Letters of recommendation from teachers will be required.
- ▶ • Transfers will complete an application similar to the one submitted by the freshmen.

## QUESTIONS?

Contact Josh Burick (630-562-7518 or [jburick@wheatonacademy.org](mailto:jburick@wheatonacademy.org)) to ask questions or to apply.



# **SAMPLE STUDENT SCHEDULES**





# AP FOCUS SCHEDULES

Goal: Project in AP Discipline

GRADE 9	GRADE 10	GRADE 11	GRADE 12
<p><b>Semester 1</b>            Foundations of Faith            Adv. Math            Physics            Intro to Historical Inquiry            English I            Intro to Media Arts*            Elective</p> <p><b>Semester 2</b>            Foundations of Faith            Adv. Math            Physics            English I            Elective            Elective            Elective</p>	<p><b>Semester 1</b>            AP Seminar            AP World History            Adv. Math            Genetics and Biological Research            Communication for the 21st Century            Spiritual Formation            Semester Individual Project</p> <p><b>Semester 2</b>            AP Seminar            AP World History            Adv. Math            Ecology and Human Impact            Elective            Flex Class            Semester Team Project            Summer Chemistry</p>	<p><b>Semester 1</b>            AP US History            AP Statistics            AP Research            AP English Literature and Composition            Doctrine and Apologetics            Elective            Elective            Year Project</p> <p><b>Semester 2</b>            AP US History            AP Statistics            AP Research            AP English Literature and Composition            Life of Christ            Elective            Elective            Year Project</p>	<p><b>Semester 1</b>            Topics in Science and Biblical Truth            AP Environmental Science            AP Computer Science            Calculus and Analytic Geometry III            Flex Class            Semester Project            Semester Project</p> <p><b>Semester 2</b>            Who Lives, Who Dies, Who Tells Your Story?            The Ethics of Science and Storytelling            AP Environmental Science            AP Computer Science            Elective            Flex Class            Semester Project            Semester Project</p>





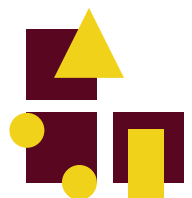
# ART/MUSIC FOCUS SCHEDULE

**Goal: Animated film with original score**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
<p><b>Semester 1</b></p> <p>Foundations of Faith Math Physics Intro to Historical Inquiry English I Intro to Media Arts Elective</p> <p><b>Semester 2</b></p> <p>Foundations of Faith Math Physics English I Orchestra Elective Elective</p>	<p><b>Semester 1</b></p> <p>AP Seminar Spiritual Formation Math Genetics and Biological Research Communications for the 21st Century Semester Individual Project Orchestra</p> <p><b>Semester 2</b></p> <p>English World History Math Ecology and Human Impact Orchestra Flex Class Semester Team Project</p>	<p><b>Semester 1</b></p> <p>U.S. History Statistics and Data Science Doctrine and Apologetics Video Production Orchestra Year Project Year Project</p> <p><b>Semester 2</b></p> <p>U.S. History Statistics and Data Science Life of Christ Story and Animation Design Orchestra Flex Class Year Project</p>	<p><b>Semester 1</b></p> <p>Philosophy, Theology, and Worldview Orchestra AP Music Theory Cinematography* Flex Class Year Project Year Project</p> <p><b>Semester 2</b></p> <p>Who Lives, Who Dies, Who Tells Your Story? The Ethics of Science and Storytelling Orchestra Film/Video Aesthetics* AP Music Theory Flex Class Year Project Year Project</p>

*One summer History credit required before graduation*

*\*Potential Online or Alternative Course*



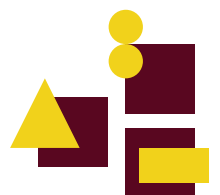


# ART/FILM FOCUS SCHEDULE

**Goal: Animated film with sculptural integration**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
<p><b>Semester 1</b></p> <p>Foundations of Faith Math Physics Intro to Historical Inquiry English I Intro to Media Arts Elective</p> <p><b>Semester 2</b></p> <p>Foundations of Faith Math Physics English I Intro to Ceramics Elective Elective</p>	<p><b>Semester 1</b></p> <p>AP Seminar World History Math Genetics and Biological Research Communication for the 21st Century Spiritual Formation Semester Individual Project</p> <p><b>Semester 2</b></p> <p>English World History Math Ecology and Human Impact Intermediate Ceramics Flex Class Semester Team Project Summer Chemistry</p>	<p><b>Semester 1</b></p> <p>US History Statistics and Data Science Doctrine and Apologetics Graphic Design I Year project Year project Focus Elective</p> <p><b>Semester 2</b></p> <p>US History Statistics and Data Science Life of Christ Advanced Ceramics Focus Elective Flex Class Year Project</p>	<p><b>Semester 1</b></p> <p>Philosophy, Theology, and Worldview Video Production Sculpture Flex Class Year Project Year Project Internship</p> <p><b>Semester 2</b></p> <p>Who Lives, Who Dies, Who Tells Your Story? The Ethics of Science and Storytelling Story and Animation Design Introduction to Motion Pictures and Television* Flex Class Year Project Year Project Internship</p>

*\*Potential Online or Alternative Course*





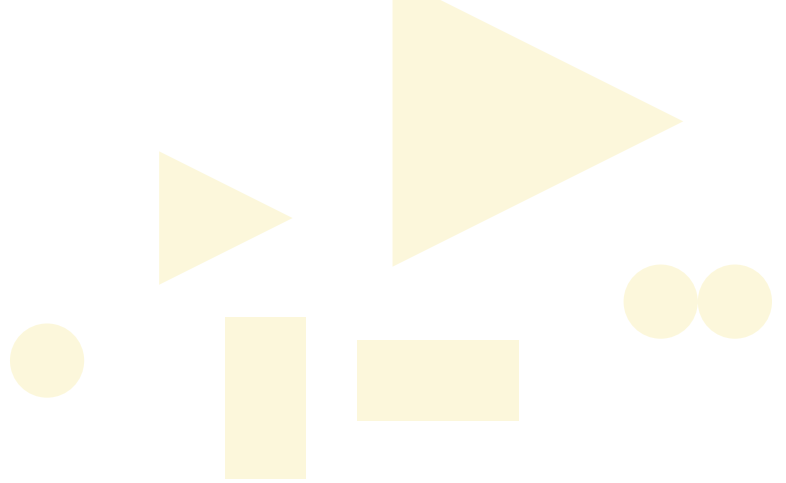
# HUMANITIES FOCUS SCHEDULE

**Goal: Historical case study**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
<p><b>Semester 1</b></p> <p>Foundations of Faith Math Physics Intro to Historical Inquiry English I Adv. Elective Elective</p> <p><b>Semester 2</b></p> <p>Foundations of Faith Math Physics Heroes and Villains English I Adv. Elective Elective</p>	<p><b>Semester 1</b></p> <p>AP Seminar Contemporary World History Math Genetics and Biological Research Communications Spiritual Formation Semester Individual Project</p> <p><b>Semester 2</b></p> <p>Adv. English World History: Revolutions Math Ecology and Human Impact Elective Flex Class Semester Team Project</p>	<p><b>Semester 1</b></p> <p>U.S. History Statistics and Data Science Doctrine and Apologetics AP Language and Composition Writers Workshop Year project Year project</p> <p><b>Semester 2</b></p> <p>US History Statistics and Data Science Life of Christ AP Language and Composition Flex Class Elective Year project</p>	<p><b>Semester 1</b></p> <p>Philosophy, Theology, and Worldview AP Literature and Composition Art History Introduction to Anthropology* Flex Class Year Project Year Project</p> <p><b>Semester 2</b></p> <p>Who Lives, Who Dies, Who Tells Your Story? The Ethics of Science and Storytelling AP Literature and Composition Latin American History, Culture, and Language Introduction to Sociology* Flex Class Year Project Year Project</p>

*\*Potential Online or Alternative Course*





# BUSINESS FOCUS SCHEDULE

**Goal: business model with app design**

GRADE 9	GRADE 10	GRADE 11	GRADE 12
<p><b>Semester 1</b></p> <p>Foundations of Faith Math Physics Intro to Historical Inquiry English I Business Principles Focus Elective</p> <p><b>Semester 2</b></p> <p>Foundations of Faith Math Physics English I Intro to Media Arts Focus Elective Focus Elective</p>	<p><b>Semester 1</b></p> <p>AP Seminar World History Math Genetics and Biological Research Communications Semester Individual Project Spiritual Formation</p> <p><b>Semester 2</b></p> <p>English World History Math Ecology and Human Impact Flex Class Semester Team Project Intro to Programming</p>	<p><b>Semester 1</b></p> <p>U.S. History Statistics and Data Science Doctrine and Apologetics Marketing and Communication Year Project Year Project Internship</p> <p><b>Semester 2</b></p> <p>U.S. History Statistics and Data Science Life of Christ Advanced Programming Flex Class Year Project Internship</p>	<p><b>Semester 1</b></p> <p>Philosophy, Theology, and Worldview IncubatorEDU: Entrepreneurship and Innovation AP Microeconomics Flex Class Semester Project Semester Project Internship</p> <p><b>Semester 2</b></p> <p>Who Lives, Who Dies, Who Tells Your Story? The Ethics of Science and Storytelling Graphic Design I AP Macroeconomics Flex Class Semester Project Semester Project Internship</p>

