How to Sign up

SCAN the QR CODE
Complete the sign up form

📞 **+1 803-738-3326**

📍 **763 Fashion Drive, Columbia, SC 29229**

OUR MISSION

TO EMPOWER A DIVERSE COMMUNITY OF STUDENTS THROUGH INNOVATIVE AND AUTHENTIC LEARNING EXPERIENCES, PREPARING THEM FOR SUCCESS IN AN EVOLVING WORLD.

ONE STUDENT, ONE INNOVATION AT A TIME.

www.R2i2.org

Join
the
Innovation

STUDENT INNOVATION CENTER @R2i2

WHERE WE FOSTER A CULTURE OF INNOVATION AND RESILIENCE, PREPARING STUDENTS TO BECOME IMPACTFUL LEADERS.

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INFORMATION ON THE STUDENT INNOVATION CENTER

The Student Innovation Center offers students in grades 10-12 CTE courses not available at their home schools.

The goal of the Student Innovation Center is to help students become College and Career Ready. This includes becoming completers in one of the 15 career pathways.

How do I get from my homeschool to the SIC?
Each high school has a shuttle bus that picks up at the school and drops off at the SIC daily. Shuttle buses pick up at the home school's bus loop.

How can I take classes at the Student Innovation Center?
If a student is interested in taking classes at the SIC, they must contact their home school counselor.

LIST OF INDUSTRY CERTIFICATIONS OFFERED

Industry Certifications Offered:

While taking classes at the Student Innovation Center, students will be prepared to take the following certifications:

- OSHA 10
- CATIA v5
- Digital Media, Advanced
- Azure AZ-900
- ServSafe Food Handlers
- ServSafe Managers
- S.T.A.R.T.-Skills, Training, and Results
- ASE xEV Level 1 Safety
- ASE xEV Level 2 High Voltage
- Snap-on 504 Multimeter
- Computer Programming 1
- Computer Programming 2
- PECEP Python Programmer
- Unity-Programmer
- Stukent Social Media Marketing

CULINARY ARTS

COURSES OFFERED:

- **Baking & Pastry Level 1**
- **Advanced Baking & Pastry (Level 2)**

Baking and Pastry students will develop advanced skills in safety and sanitation in addition to management and professionalism.

Specialized content includes units on formulas and techniques, basic baking principles, specialized dietary baking, breads, desserts and pastries, and advanced techniques for specialty cakes, confections, piping, plate presentation, and flavor pairing.

COMPUTER PROGRAMMING, GAME DESIGN AND DEVELOPMENT

COURSES OFFERED:

- **Computer Programming 1 with Python**
- **Computer Programming 2 with Python**
- **Game Design and Development**

Computer Programming 1 with Python focuses on the fundamentals of computer programming, covering topics like software, program design, and development. Students gain practical experience using modern, object-oriented programming languages.

Computer Programming 2 with Python builds on these fundamentals, further emphasizing programming concepts with modern, object-oriented languages.

Game Design and Development is a course covering major aspects of game design including character and world development, game playing, game genres, and theories and principles of game design. Students will gain hands-on experience in simple game development.

ARTIFICIAL INTELLIGENCE

ADVANCED AUTOMOTIVE ENGINEERING TECHNOLOGY (CONT'D)

COURSES OFFERED:

- **Intro to Artificial Intelligence**
- **Artificial Intelligence Application**

In Intro to Artificial Intelligence involves simulating intelligent behavior in computers, encompassing programming, data collection science, mathematical reasoning, creative problem solving, ethics, and practical experiences. Students will study algorithms in the areas of Manufacturing, Sports, Entertainment, Agriculture, and Health Care.

Artificial Intelligence Applications is the second course in the pathway that will build on the information students learned in the Intro to AI course.

COURSES OFFERED:

- **Battery Research, Development, and Innovation Capstone**

In this capstone course for the Advanced Automotive Engineering Technology pathway, students will apply prior knowledge of sustainable energy, electric vehicles, and design to create an innovation in the clean energy or automotive sector. Using an invention process from Lemelson-MIT, students will research a problem in local industry and follow human centered design to engineer a unique solution, resulting in a functional prototype and a provisional patent.

These two courses, along with Mechanical Design 1 and The Battery Research and Development capstone, make up the new Advanced Automotive Engineering Technology pathway.

ADVANCED AUTOMOTIVE ENGINEERING TECHNOLOGY

COURSES OFFERED:

- **Clean Energy Systems**
- **EV (Electric Vehicle) Fundamentals**

In Clean Energy Systems, students work collaboratively through an engineering design process to build, test, and optimize clean energy solutions for local and global problems.

Students build on their foundational knowledge of circuits, electricity, and power from Clean Energy Systems in order to explore electric vehicles, high voltage batteries, and the impact of emerging technologies on EV manufacturing and the charging infrastructure in EV Fundamentals. Students build a road ready EV as part of this course.

3D PRINTING & DESIGN/ MECHANICAL DESIGN & ARCHITECTURE

COURSES OFFERED:

- **Mechanical Design 1**
- **Mechanical Design 2**
- **Architectural Design 1**
- **Architectural Design 2**
- **EGT 106 (MTC Dual Enrollment**
- **EGT 156 (MTC Dual Enrollment**
- **AET 110 (MTC Dual Enrollment**

The Mechanical Design and EGT courses offered at the Student Innovation Center are designed to train students in the use of CAD/CAM technology. Students will train on CATIA v5, a software used by manufacturers, and Additive Manufacturing, better known as 3D Printing. Students will train for certification in those areas at a professional level.

The Architectural Design and AET courses offered at the Student Innovation Center are designed to train students in the use of REVIT, a professional Architectural software used in industry. Students will train to create floor plans, technical drawings, and 3D renderings of architectural designs and manufacture them with 3D printers.

FASHION MARKETING, MARKETING & MERCHANDISING

COURSES OFFERED:

- **Fashion Marketing**
- **Marketing**
- **Merchandising**

The Fashion Marketing course explores concepts and practices of the fashion industry to include an overview, the nature of fashion, elements and principles of design, textile basics, and career development.

The Marketing course introduces students to the world of marketing. Students will learn about marketing fundamentals, economics, and the Marketing functions of price planning and strategies, promotion, selling, and product distribution.

The Merchandising course prepares individuals to understand the process of merchandising as it relates to the resale of products and product lines for stores, chains, and other retail enterprises.

DIGITAL MULTIMEDIA & ANIMATION

COURSES OFFERED:

- **Digital Multimedia**
- **Foundations of Animation**
- **Advanced Animation**

The Digital Multimedia course focuses on developing skills and knowledge in 5 areas of multimedia design and production. These include graphic design, audio & video production, website development & animation.

The Foundations of Animation course focuses on developing the fundamental knowledge and technical skills required to create a 2D animation in an industry standard animation software, Toon Boom Harmony Premium.

The Advanced Animation course builds on the Foundations of Animation course with a focus on establishing a working knowledge of animation principles, software tools and techniques.