ENGINEERING PATHWAY

2 YEAR PLANS (Junior and Senior Years at STA)

Summit Technology Academy

Engineering Career Focus Area	Blended Computer Engineering Career Focus Area	Blended Biomedical Engineering Career Focus Area	Digital Media Engineer Career Focus Area	Design and Drafting Career Focus Area
This Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students to be a professionally licensed engineer (e.g. Mechanical, Electrical, Aerospace, Civil, Manufacturing, etc.).	**BLENDED ENGINEERING CAREER FOCUS AREAS** combine a year-long Engineering course at STA with a year-long course from another STA Pathway.			This accelerated early college degree Career Focus Area in the field of Design and Drafting is designed for focused juniors who would like to begin their four year college degree when they are juniors in high school. This Career Focus Area starts with a year at STA and concludes with a year of courses through MIC.
	This Blended Computer Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students to be a computer engineer.	This Blended Biomedical Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students to be a biomedical engineer. The spring semester of the student's senior year is designed to allow for student to pursue an internship experience in this field.	This Blended Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of digital media engineering. (e.g. Audio Engineer, Sound Engineer, etc.).	
11th Grade *(choose two of these semester courses at STA)* • Computer Integrated Manufacturing • Digital Electronics • Aerospace Engineering	**11th Grade** *(take both semester courses at STA)* • Computer Integrated Manufacturing • Digital Electronics	**11th Grade** *(take both semester courses at STA)* • Computer Integrated Manufacturing • Digital Electronics	**11th Grade** *(take both semester courses at STA)* • Computer Integrated Manufacturing • Digital Electronics	**11th Grade** *(take both semester courses at STA)* • Computer Integrated Manufacturing • Digital Electronics
12th Grade *(take both semester capstone courses at STA)* • Engineering Design and Development • Engineering Field Experience	**12th Grade** *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II	**12th Grade** • Medical Interventions/ Biomedical Innovation	**12th Grade** • Digital Media Technology	**12th Grade** THE MISSOURI INNOVATION CAMPUS Students take one course at STA and none at their high school, instead students only continue with a combination of online as well as college courses through MCC and UCM to complete their high school requirements for a high school diploma and to complete bachelor's degree through UCM.

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

Students are free to choose classes from any classes offered at STA to create a customized personal plan of study in order to help them prepare their specific college and career plans as long as they meet the required prerequisites for those courses.

ENGINEERING PATHWAY

1 YEAR PLANS (Junior *or* Senior Year at STA)

Summit Technology Academy

Civil Engineering/Architecture Career Focus Area	Traditional Engineering Career Focus Area
This Civil Engineering/Architecture Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students to be a civil engineer or architect.	This one-year Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students to be a professionally licensed engineer (e.g. Mechanical, Electrical, Aerospace, Civil, Manufacturing, etc.).
12th Grade Only *(take both semester capstone courses at STA)* • Engineering Design and Development • Engineering Field Experience **PREREQUISITE:** *(taken at home high school)* • Civil Engineering and Architecture class **RECOMMENDED:** Advanced concepts in CAD if available at your school	**11th or 12th Grade** *(choose two of these semester courses at STA)* • Computer Integrated Manufacturing • Digital Electronics • Aerospace Engineering

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

HEALTH SCIENCE PATHWAY

2 YEAR PLANS (Junior and Senior Years at STA)

Summit Technology Academy

Health Science Career Focus Area	Healthcare Information Career Focus Area	Global Healthcare Career Focus Area	Biomedical Engineering Career Focus Area
This Health Science Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of healthcare (e.g. Physician, Nurse, Medical Researcher, Physical Therapist, Pharmacist, etc.).	**BLENDED HEALTH SCIENCE CAREER FOCUS AREAS** Blended Health Science Career Focus Areas combine a year-long health science course at STA with a year-long course from another STA Pathway.		
	This Blended Health Science Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of healthcare information (e.g. Software Engineer in healthcare industry, Network Engineer in healthcare industry, etc.).	This Blended Health Science Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of international healthcare (e.g. Software Engineer in global company in US or abroad, Network Engineer in global company in US or abroad, etc.).	This Blended Biomedical Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of biomedical engineering. (e.g. Biomedical Engineer, Biomedical Engineering Research, etc.).
11th Grade *(choose one of the following courses at STA)* • Pre-allied Health Academy • Medical Interventions/ Biomedical Innovation	**11th Grade** *(choose one of the following courses at STA)* • Pre-allied Health Academy • Medical Interventions/ Biomedical Innovation	**11th Grade** *(choose one of the following courses at STA)* • Pre-allied Health Academy • Medical Interventions/ Biomedical Innovation	**11th Grade** • Medical Interventions/ Biomedical Innovation
12th Grade *(choose one of the following courses at STA)* • Pre-professional Nursing • Medical Interventions/ Biomedical Innovation Courses may be taken with Medical Interventions/ Biomedical Innovation followed by Pre-allied Health Academy the senior year if prerequisites are met. *Pre-professional Nursing can ONLY be taken during the senior year.*	**12th Grade** *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II Courses may be taken with Software Development I & II or Network Engineering I & II during the junior followed by Pre-allied Health Academy or Medical Interventions/Biomedical Innovation the senior year if prerequisites are met.	**12th Grade** • Summit International Studies Academy Courses may be taken with Summit International Studies Academy during the junior followed by Pre-allied Health Academy or Medical Interventions/ Biomedical Innovation the senior year if prerequisites are met.	**12th Grade** *(choose one of the following courses at STA)* • Computer Integrated Manufacturing/ Internship in STEM **OR** • Digital Electronics/Computer Integrated Manufacturing Courses may be taken with Computer Integrated Manufacturing/Internship in STEM during the junior followed by Medical Interventions/Biomedical Innovation the senior year if prerequisites are met.

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

Students are free to choose classes from any classes offered at STA to create a customized personal plan of study in order to help them prepare their specific college and career plans as long as they meet the required prerequisites for those course.

HEALTH SCIENCE PATHWAY

1 YEAR PLANS (Junior *or* Senior Year at STA)

Summit
Technology
Academy

Health Science Career Exploration Career Focus Area	Physician or Medical Researcher Career Focus Area	Nursing Career Focus Area
This Health Science Career Focus Area is designed for students wanting to explore healthcare career fields and participate in internship opportunities related to various healthcare fields. Students glean advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of healthcare (e.g. Physical Therapist, Pharmacist, Physician, Nurse, Medical Researcher, Radiologist, etc.).	This Physician and Medical Research Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students as a doctor or medical research and science (e.g. Physician, Medical Researcher, Physical Therapist, Pharmacist, etc.).	This Nursing Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for bachelor of science in nursing degree programs at a university. (e.g. Emergency Room Nurse, Hospital Nurse, Nurse Practitioner, etc.).
11th or 12th Grade • Pre-allied Health Academy	**11th or 12th Grade** • Medical Interventions/ Biomedical Innovation	**12th Grade ONLY** • Pre-professional Nursing

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

CREATIVE SCIENCE PATHWAY

2 YEAR PLANS (Junior and Senior Years at STA)

Summit Technology Academy

International Computer Science Career Focus Area	International Education Career Focus Area	International Hospitality & Tourism Management Career Focus Area
BLENDED CREATIVE SCIENCE CAREER FOCUS AREAS Blended Creative Science Career Focus Areas combine a year-long creative science course at STA with a year-long course from another STA Pathway.		
This blended International Studies Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of computer science in a global setting (e.g. Software Engineer in global company in US or abroad, Network Engineer in global company in US or abroad, etc.).	This blended International Studies Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of education in a global setting (e.g. teacher in foreign country, teacher at an embassy school, Non-Governmental Agency, International Non-profit organization, missionary, Trainer for global company, etc.).	This blended global hospitality and tourism management pathway is designed to prepare students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college for hotel and tourism management career field in a global context.
11th Grade • Summit International Studies Academy	**11th Grade** • Summit International Studies Academy	**11th Grade** • Summit International Studies Academy
12th Grade *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II Courses may be taken with Software Development I & II or Network Engineering I & II during the junior followed by Summit International Studies Academy the senior year if prerequisites are met.	**12th Grade** • Teacher Educator Academy Teacher Educator Academy Course may ONLY be taken during the senior year.	**12th Grade** • Hospitality & Tourism Management Program Courses may be taken with Hospitality & Tourism Management Program during the junior followed by Summit International Studies Academy the senior year if prerequisites are met.

Blended International Studies Career Focus Areas

The Summit International Studies Academy Course can be taken prior to or after any other Summit Technology Academy course to provide international experience and training that helps to prepare students for the global marketplace in various career fields.

Blended Educational Studies Career Focus Areas

The Teacher Educator Academy Course can be taken after any other Summit Technology Academy course to provide educational and corporate training-related experience that helps to prepare students as a cooperate trainer in various career fields.

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

Students are free to choose classes from any classes offered at STA to create a customized personal plan of study in order to help them prepare their specific college and career plans as long as they meet the required prerequisites for those course.

CREATIVE SCIENCE PATHWAY

2 YEAR PLANS (Junior and Senior Years at STA)

Summit Technology Academy

International Digital Media Technology Career Focus Area	Digital Media Technology Engineer Career Focus Area	Digital Media Technology Computer Science Career Focus Area
BLENDED CREATIVE SCIENCE CAREER FOCUS AREAS Blended Creative Science Career Focus Areas combine a year-long creative science course at STA with a year-long course from another STA Pathway.		
This blended International Studies Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of digital media technology in a global setting (e.g. Audio or Sound Engineer in global company in US or abroad, Producer or Entertainment Specialist in global company in US or abroad, etc.).	This blended International Studies Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of digital media technology (e.g. Audio or Sound Engineer).	This Digital Media Technology/ Computer Science Pathway is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for digital media fields that require advanced computer science knowledge.
11th Grade • Digital Media Technology	**11th Grade** • Digital Media Technology	**11th Grade** • Digital Media Technology
12th Grade • Summit International Studies Academy Courses may be taken with Summit International Studies Academy during the junior followed by Digital Media Technology the senior year if prerequisites are met.	**12th Grade** • Digital Electronics/Computer Integrated Manufacturing Courses may be taken with Digital Electronics/ Computer Integrated Manufacturing during the junior followed by Digital Media Technology the senior year if prerequisites are met.	**12th Grade** *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II Courses may be taken with Software Development I & II or Network Engineering I & II during the junior followed by Digital Media Technology the senior year if prerequisites are met.

Blended International Studies Career Focus Areas

The Summit International Studies Academy Course can be taken prior to or after any other Summit Technology Academy course to provide international experience and training that helps to prepare students for the global marketplace in various career fields.

Blended Educational Studies Career Focus Areas

The Teacher Educator Academy Course can be taken after any other Summit Technology Academy course to provide educational and corporate training-related experience that helps to prepare students as a cooperate trainer in various career fields.

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

Students are free to choose classes from any classes offered at STA to create a customized personal plan of study in order to help them prepare their specific college and career plans as long as they meet the required prerequisites for those course.

CREATIVE SCIENCE PATHWAY

1 YEAR PLANS (Junior *or* Senior Year at STA)

Summit
Technology
Academy

International Studies Career Focus Area	Digital Media Technology Career Focus Area	Education Career Focus Area	Hospitality & Tourism Management Program Career Focus Area
This International Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of international studies or to study abroad during a portion or for their entire (e.g. International Business, International Law, International Technology, etc.).	This Digital Media Technology Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of digital media or to go directly into the entertainment workforce. (e.g. Sound Engineer, Producer, Musician, Videography, etc.).	This Education Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of education. (e.g. Elementary Teacher, Secondary Teacher, University Instructor, Corporate Trainer etc.).	This Hospitality and Tourism Management pathway is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of hospitality and tourism management. (e.g. tourism management, hotel management, sport venue management, restaurant management etc.).
11th or 12th Grade • Summit International Studies Academy	**11th or 12th Grade** • Digital Media Technology	**12th Grade ONLY** • Teacher Educator Academy	**11th or 12th Grade** • Hospitality & Tourism Management Program

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

COMPUTER SCIENCE PATHWAY

2 YEAR PLANS (Junior and Senior Years at STA)

Summit Technology Academy

Computer Science Career Focus Area	CyberSecurity Career Focus Area	System Engineering Career Focus Area	CyberSecurity Career Focus Area	Software Development Career Focus Area
This Computer Science Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of computer science (e.g. Network Engineer, Software Engineer, Systems Engineer, Software Development, etc.).	This CyberSecurity Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of CyberSecurity. [Scholarship links]	**ACCELERATED EARLY COLLEGE DEGREE CAREER FOCUS AREAS** Missouri Innovation Campus (MIC) Computer Science Career Focus Areas		
		This accelerated early college degree Career Focus Area in the field of Systems Engineering is designed for focused juniors who would like to begin their four year college degree when they are juniors in high school.	This accelerated early college degree Career Focus Area in the field of CyberSecurity is designed for focused juniors who would like to begin their four year college degree when they are juniors in high school.	This accelerated early college degree Career Focus Area in the field of Software Development is designed for focused juniors who would like to begin their four year college degree when they are juniors in high school.
11th Grade • Network Engineering I & II	**11th Grade** • Network Engineering I & II	**11th Grade** • Network Engineering I & II	**11th Grade** • Network Engineering I & II	**11th Grade** • Software Development I & II
12th Grade • Software Development I & II Courses may be taken with Software I & II followed by Network Engineering I & II the senior year if prerequisites are met.	**12th Grade** • CyberSecurity & Internship in STEM	**12th Grade** THE MISSOURI INNOVATION CAMPUS Students take one course at STA and none at their high school, instead students only continue with a combination of online as well as college courses through MCC and UCM to complete their high school requirements for a high school diploma and to complete bachelor's degree through UCM.	**12th Grade** THE MISSOURI INNOVATION CAMPUS Students take one course at STA and none at their high school, instead students only continue with a combination of online as well as college courses through MCC and UCM to complete their high school requirements for a high school diploma and to complete bachelor's degree through UCM.	**12th Grade** THE MISSOURI INNOVATION CAMPUS Students take one course at STA and none at their high school, instead students only continue with a combination of online as well as college courses through MCC and UCM to complete their high school requirements for a high school diploma and to complete bachelor's degree through UCM.

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

Students are free to choose classes from any classes offered at STA to create a customized personal plan of study in order to help them prepare their specific college and career plans as long as they meet the required prerequisites for those course.

COMPUTER SCIENCE PATHWAY

2 YEAR PLANS (Junior and Senior Years at STA)

Summit Technology Academy

Computer Engineering Career Focus Area	Healthcare Information Career Focus Area	International Computer Science Career Focus Area	Digital Media/ Computer Science Career Focus Area
BLENDED COMPUTER SCIENCE CAREER FOCUS AREAS Blended Engineering Career Focus Areas combine a year-long engineering course at STA with a year-long course from another STA Pathway.			
This Blended Computer Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students to be a computer engineer.	This Blended Health Science Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of healthcare information (e.g. Software Engineer in healthcare industry, Network Engineer in healthcare industry, etc.).	This Blended International Studies Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of computer science in a global setting (e.g. Software Engineer in global company in US or abroad, Network Engineer in global company in US or abroad, etc.).	This Digital Media Technology/ Computer Science Pathway is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for digital media fields that require advanced computer science knowledge.
11th Grade *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II	**11th Grade** *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II	**11th Grade** *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II	**11th Grade** *(choose one of the following courses at STA)* • Software Development I & II • Network Engineering I & II
12th Grade • Digital Electronics and Computer Integrated Manufacturing Courses may be taken with Digital Electronics and Computer Integrated Manufacturing followed by Software Development I & II or Network Engineering I & II the senior year if prerequisites are met.	**12th Grade** *(choose one of the following courses at STA)* • Pre-allied Health Academy • Medical Interventions/ Biomedical Innovation • Pre-professional Nursing Courses may be taken with Pre-allied Health Academy or Medical Interventions/ Biomedical Innovation during the junior followed by Software Development I & II or Network Engineering I & II the senior year if prerequisites are met. Pre-professional Nursing can ONLY be taken during the senior year.	**12th Grade** • Summit International Studies Academy Courses may be taken with Summit International Studies Academy during the junior followed by Software Development I & II or Network Engineering I & II the senior year if prerequisites are met.	**12th Grade** • Digital Media Technology Courses may be taken with Digital Media Technology during the junior followed by Software Development I & II or Network Engineering I & II the senior year if prerequisites are met.

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.

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COMPUTER SCIENCE PATHWAY

1 YEAR PLANS (Junior *or* Senior Year at STA)

Summit Technology Academy

Networking Engineering Career Focus Area	Software Engineering Career Focus Area
This Network Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of computer science (e.g. Network Engineer, Systems Engineer, etc.).	This Software Engineering Career Focus Area is designed for students wanting to receive advanced and accelerated preparation for post-secondary degree programs at a college that prepare students for the field of computer science (e.g. Software Engineer, Software Developer, etc.).
11th or 12th Grade • Networking Engineering I & II	**11th or 12th Grade** • Software Engineering I & II

Please see STA class prerequisites located on each STA course page. Course pages can be found on STA's website at **sta.lsr7.org**.