



ENGINEERING PATHWAY

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

	Digital Electronics* (semester course)	Computer Integrated Manufacturing* (semester course)	Aerospace Engineering* (semester course)
7th GRADE	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>
8th GRADE	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>
9th GRADE	<p>Alg I or higher (e.g. Geometry)</p> <p>Recommended: Engineering class or PLTW Intro. to Engineering (POE) (if offered in your district)</p>	<p>Alg I or higher (e.g. Geometry)</p> <p>Recommended: Engineering class or PLTW Intro. to Engineering (if offered in your district)</p>	<p>Geometry or higher</p> <p>Recommended: Engineering class or PLTW Intro. to Engineering (if offered in your district)</p>
10th GRADE	<p>Geometry or higher (e.g. Alg II)</p> <p>Recommended: Engineering class or PLTW Principles of Engineering (POE) (if offered in your district)</p>	<p>Geometry or higher (e.g. Alg II)</p> <p>Recommended: Engineering class or PLTW Principles of Engineering (if offered in your district)</p>	<p>Alg II or higher</p> <p>Recommended: Engineering class or PLTW Principles of Engineering (if offered in your district)</p>
11th GRADE	<p>Digital Electronics*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Computer Integrated Manufacturing*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Aerospace Engineering*</p> <p>Prerequisite: Alg II</p> <p>Recommended: Physics; PLTW IED & POE classes (if offered in your district) Physics may be taken concurrently at sending school. <i>See full prerequisite list on course page</i></p>
12th GRADE	<p>Digital Electronics*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Computer Integrated Manufacturing*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Aerospace Engineering*</p> <p>Prerequisite: Alg II</p> <p>Recommended: Physics; PLTW IED & POE classes (if offered in your district) Physics may be taken concurrently at sending school. <i>See full prerequisite list on course page</i></p>

* may be taken in 11th or 12th grade



ENGINEERING PATHWAY

(SECOND YEAR COURSES)

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

	Engineering Design & Development/ Engineering Field Experience (year-long course)	Aerospace Academy (year-long course)
7th GRADE	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>
8th GRADE	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW Engineering courses (if offered in your district)</p>
9th GRADE	<p>Alg I or higher (e.g. Geometry)</p> <p>Recommended: Engineering class or PLTW Intro. to Engineering (if offered in your district)</p>	<p>Geometry or higher</p> <p>Recommended: Engineering class or PLTW Intro. to Engineering (if offered in your district)</p>
10th GRADE	<p>Geometry or higher (e.g. Alg II)</p> <p>Recommended: Engineering class or PLTW Principles of Engineering (if offered in your district)</p>	<p>Alg II or higher</p> <p>Recommended: Engineering class or PLTW Principles Engineering (if offered in your district)</p>
11th GRADE	<p>Choose 2 at STA: Digital Electronics, Computer Integrated Manufacturing or Aerospace Engineering at STA OR Civil Engineering/Architecture at your sending school. Take Physics at sending school as well.</p>	<p>Physics</p> <p>Recommended: Digital Electronics and Aerospace Engineering at STA OR Civil Engineering/Architecture at your sending school.</p>
12th GRADE	<p>Engineering Design and Development/ Eng. Field Experience Physics and Pre-calculus may be taken concurrently with EDD/EFE. <i>See full prerequisite list on course page</i></p>	<p>Aerospace Academy Physics and Pre-calculus may be taken concurrently with EDD/EFE. <i>See full prerequisite list on course page</i></p>

* may be taken in 11th or 12th grade












COMPUTER SCIENCE

PATHWAY

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

	Software Development I & II* 	Network Engineering I & II* 	CyberSecurity 
7th GRADE 	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle
8th GRADE 	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle
9th GRADE 	Alg 1 or higher (e.g. Geometry) Recommended: computer programming class or Geometry	Alg I or higher (e.g. Geometry) Recommended: CHAOS I (also offered through R7 Online)	Alg 1 or higher (e.g. Geometry) Recommended: CHAOS I (also offered through R7 Online)
10th GRADE 	Geometry or higher (e.g. Alg II) Recommended: computer programming class or Alg II	Geometry or higher (e.g. Alg II) Recommended: CHAOS I or II (also offered through R7 Online)	Geometry or higher (e.g. Alg II) Recommended: CHAOS II (also offered through R7 Online)
11th GRADE 	Software Development I & II* Prerequisite: Alg II or computer programming <i>See full prerequisite list on course page</i>	Network Engineering I & II* <i>See full prerequisite list on course page</i>	Network Engineering I & II
12th GRADE 	Software Development I & II* Prerequisite: Alg II or computer programming <i>See full prerequisite list on course page</i>	Network Engineering I & II* <i>See full prerequisite list on course page</i>	CyberSecurity Prerequisite: Network Engineering I & II <i>See full prerequisite list on course page</i>

* may be taken in 11th or 12th grade












HEALTH SCIENCE

PATHWAY

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

	Allied Health Academy* 	Professional Nursing 	Medical Interventions/ Biomedical Innovation* 
7th GRADE 	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>
8th GRADE 	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science, communication arts and engineering technology you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>
9th GRADE 	<p>Alg I or higher (e.g. Geometry), Biology or Chemistry</p> <p>Recommended: Anatomy/Physiology</p>	<p>Alg I or higher (e.g. Geometry), Biology or Chemistry</p> <p>Recommended: Principles of Biomedical Science Suggested: Volunteer work</p>	<p>Alg I or higher (e.g. Geometry) Biology and Chemistry</p> <p>Recommended: PLTW Principles of Biomedical Sci (PBS) (if offered in your district) or Anatomy/Physiology Biology, Chemistry or other rigorous related science course</p>
10th GRADE 	<p>Biology or Chemistry</p> <p>Recommended: Anatomy/Physiology</p>	<p>Biology or Chemistry</p> <p>Recommended: Anatomy/Physiology or Human Body Systems and Alg II Suggested: Volunteer work</p>	<p>Biology and Chemistry</p> <p>Recommended: PLTW Human Body Systems (HBS) (if offered in your district) or Anatomy/Physiology Biology, Chemistry or other rigorous related science course</p>
11th GRADE 	<p>Allied Health Academy*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Biology II or Chemistry II, Anatomy/Physiology</p> <p>Recommended: Alg II and other rigorous science course Optional: Allied Health or Medical Interventions/ Biomedical Innovation at Summit Technology Academy</p>	<p>Medical Interventions/Biomedical Innovation*</p> <p><i>*It is highly recommended to take as many science lab courses as possible prior to this course. See full prerequisite list on course page</i></p>
12th GRADE 	<p>Allied Health Academy*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Professional Nursing</p> <p><i>See full prerequisite list on course page</i></p>	<p>Medical Interventions/Biomedical Innovation*</p> <p><i>*It is highly recommended to take as many science lab courses as possible prior to this course. See full prerequisite list on course page</i></p>

* may be taken in 11th or 12th grade












HUMAN SERVICES & FINANCE

PATHWAY

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

	International Studies Academy* 	Teacher Educator Academy 	Business Finance and Fintech* 
7th GRADE 	<p>Challenge yourself to take the highest level math, science, communication arts and social studies you can handle</p> <p>Recommended: Any modern language class that is offered</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: Any practical art class that is offered</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p>
8th GRADE 	<p>Challenge yourself to take the highest level math, science, communication arts and social studies you can handle</p> <p>Recommended: Any modern language class that is offered</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle in addition to any fine arts class offered</p> <p>Recommended: Any practical art class that is offered</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p>
9th GRADE 	<p>Challenge yourself to take the highest level math, science, communication arts, social studies and modern language you can handle</p>	<p>Alg I or higher (e.g. Geometry)</p> <p>Recommended: Intro to Human Services course</p>	<p>Alg I or higher (e.g. Geometry)</p> <p>Recommended: Intro. to Business or Accounting I</p>
10th GRADE 	<p>Challenge yourself to take the highest level math, science, communication arts, social studies and modern language you can handle</p>	<p>Child Development, Child or Adolescent Psychology, Psychology, Sociology</p> <p>Recommended: Parenting Course</p>	<p>Geometry or higher (e.g. Alg II)</p> <p>Recommended: Accounting or Intro to Business</p>
11th GRADE 	<p>International Studies Academy*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Child Development, Child or Adolescent Psychology, Psychology, Sociology</p> <p>Recommended: Parenting Course, Preschool Course</p>	<p>Business Finance and Fintech*</p> <p><i>See full prerequisite list on course page</i></p>
12th GRADE 	<p>International Studies Academy*</p> <p><i>See full prerequisite list on course page</i></p>	<p>Teacher Educator Academy</p> <p><i>See full prerequisite list on course page</i></p>	<p>Business Finance and Fintech*</p> <p><i>See full prerequisite list on course page</i></p>

* may be taken in 11th or 12th grade



ARTS & COMMUNICATION

PATHWAY

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

Digital Media Technology*



7th
GRADE

Challenge yourself to take the highest level math, science and communication arts you can handle in addition to any fine arts class offered

8th
GRADE

Challenge yourself to take the highest level math, science and communication arts you can handle in addition to any fine arts class offered

9th
GRADE

Alg I or higher (e.g. Geometry), Fine arts

10th
GRADE

Geometry, Fine arts

Recommended: Computer Application or Programming

11th
GRADE

Digital Media Technology*

See full prerequisite list on course page

12th
GRADE

Digital Media Technology*

See full prerequisite list on course page

* may be taken in 11th or 12th grade



MIC EARLY COLLEGE DEGREE PATHWAY

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

	MIC for Networking	MIC for CyberSecurity	MIC for Software Development I & II	MIC for Drafting & Design Technology	MIC for Big Data & Business Analytics
7th GRADE	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle Recommended: PLTW Engineering courses (if offered in your district)	Challenge yourself to take the highest level math, science and communication arts you can handle
8th GRADE	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle	Challenge yourself to take the highest level math, science, communication arts and computer science you can handle Recommended: PLTW Engineering courses (if offered in your district)	Challenge yourself to take the highest level math, science and communication arts you can handle
9th GRADE	Alg I or higher (e.g. Geometry) Recommended: CHAOS I	Alg I or higher (e.g. Geometry) Recommended: CHAOS I	Geometry or computer programming class/experience	Alg I or higher (e.g. Geometry) Recommended: Engineering class or PLTW Intro. to Engineering (if offered in your district)	Introduction to Business Accounting Recommended: Other business classes
10th GRADE	Geometry or higher (e.g. Alg II) College summer courses required Recommended: CHAOS I or II	Geometry or higher (e.g. Alg II) College summer courses required Recommended: CHAOS I or II	Alg II or computer programming class College summer courses required	Geometry or higher (e.g. Alg II) College summer courses required Recommended: Engineering class or PLTW Principles Engineering (if offered in your district)	Introduction to Business Accounting Recommended: Other business classes
11th GRADE	Network Engineering I & II College summer courses required Commit to completing high school graduation requirements except for 4th English credit and remaining elective credit prior to senior year	Network Engineering I & II College summer courses required Commit to completing high school graduation requirements except for 4th English credit and remaining elective credit prior to senior year	Software Development I & II College summer courses required Commit to completing high school graduation requirements except for 4th English credit and remaining elective credit prior to senior year Prerequisite: Alg II or previous programming knowledge	Digital Electronics and Computer Integrated Manufacturing College summer courses required Commit to completing high school graduation requirements except for 4th English credit and remaining elective credit prior to senior year	Business Finance & Fintech at STA Business and Finance College summer courses required Commit to completing high school graduation requirements except for 4th English credit and remaining elective credit prior to senior year
12th GRADE	Internship in MIC Class at STA, Internship, and College Classes College summer courses required <i>See full prerequisite list on course page</i>	Internship in MIC Class at STA, Internship, and College Classes College summer courses required <i>See full prerequisite list on course page</i>	Internship in MIC Class at STA, Internship, and College Classes College summer courses required <i>See full prerequisite list on course page</i>	Internship in MIC Class at STA, Internship and College Classes College summer courses required <i>See full prerequisite list on course page</i>	Internship in MIC Class at STA, Internship, and College Classes College summer courses required <i>See full prerequisite list on course page</i>



KU DEGREE IN 3

PATHWAY

[Early Planning Guide]



SUMMIT TECHNOLOGY
ACADEMY

	KU Degree in 3 for Allied Health	KU Degree in 3 for Medical Interventions/ Biomedical Innovation
7th GRADE	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>
8th GRADE	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>	<p>Challenge yourself to take the highest level math, science and communication arts you can handle</p> <p>Recommended: PLTW science courses (if offered in your district)</p>
9th GRADE	<p>Alg I or higher (e.g. Geometry), Biology or Chemistry</p> <p>Recommended: Anatomy/Physiology</p>	<p>Alg I or higher (e.g. Geometry) Biology and Chemistry</p> <p>Recommended: PLTW Principles of Biomedical Sci (PBS) (if offered in your district) or Anatomy/Physiology Biology, Chemistry or other rigorous related science course</p>
10th GRADE	<p>Biology or Chemistry</p> <p>Recommended: Anatomy/Physiology</p>	<p>Biology and Chemistry</p> <p>Recommended: PLTW Human Body Systems (HBS) (if offered in your district) or Anatomy/Physiology Biology, Chemistry or other rigorous related science course</p>
11th GRADE	<p>Allied Health Academy College summer courses required Commit to completing high school graduation requirements except for 4th English credit and remaining elective credit prior to senior year</p>	<p>Medical Interventions/Biomedical Innovation College summer courses required Commit to completing high school graduation requirements except for 4th English credit and remaining elective credit prior to senior year</p>
12th GRADE	<p>Internship in MIC Class at STA, Internship, and College Classes Take dual credit coursework at MCC College summer courses required</p> <p><i>See full prerequisite list on course page</i></p>	<p>Internship in MIC Class at STA, Internship, and College Classes Take dual credit coursework at MCC College summer courses required</p> <p><i>See full prerequisite list on course page</i></p>