STEM PATHWAY

STEM PATHWAY JUNIOR OR SENIOR YEAR

STEM PATHWA SENIOR YEAR ONLY

STEM Pathways

 Digital Circuits (PLTW Digital Electronics)

 RSC College Algebra (or appropriate level Math)

 RSC Chemistry I -or- Engineering Chemistry

Applied Physics

Robotics & Coding

(Principles of Engineering)

 RSC Calculus I -or-Calculus II

RSC Physics I

Program Prerequisite: Enrolled in Algebra II or higher level math College Credit Available: 1st Year - 8 hours | 2nd Year - 16 hours Student is responsible for all RSC fees & tuition costs.

ADVANCED STEM PATHWAY

YEAR

JUNIOR YEAR

SENIOR YEAR

RSC Calculus I

 Digital Circuits (PLTW Digital Electronics) RSC Calculus III RSC Engineering

Chemistry

RSC Calculus II

Robotics & Coding

(Principles of Engineering)

RSC Differential

Equations

 RSC Engineering Physics I

Program Prerequisite: Enrolled in Pre-Calculus or higher level math **College Credit Available:** 1st Year - 16 hours | 2nd Year - 16 hours Student is responsible for all RSC fees & tuition costs.



OPTION 1: STEM PATHWAY

1 year, half day. Juniors or seniors. Currently enrolled in Algebra II or higher math. Rose State College credit for Electronics and Robotics. Potential for 8 hours of college credit.

Courses would include 4 lab/activity-based courses including:

- 1. STEM pathways course
- 2. Electronic/Digital Logic and Circuits with Arduino (RSC ENGT 1304) (4hrs credit)
- 3. Robotics and Coding (RSC ENGT 1214) (4hrs credit)
- 4. Applied Physics

OPTION 2: STEM PATHWAY+

Seniors come back for second year, half day. EOC facilitates courses with Rose State College on behalf of students, to be taken via ITV on EOC campus. Potential for 16 hours of college credit.

Note: Labs for Chemistry or Physics are in person on Rose State campus. The following college credits from Rose State also transfer to OSU, OU, UCO and more.

Second year courses include:

- 1. RSC College Algebra (Math 1513) OR Plane trigonometry (MATH 1613) OR Calculus 1 (MATH 1914) (3 or 4 hours credit)
- 2. RSC Calculus 1 (MATH 1914) OR Calculus 2 (MATH 2924) (4 hours credit)
- 3. RSC Engineering Chemistry (CHEM 1225) OR Chemistry I (CHEM 1135) (4 hours credit)
- 4. RSC Physics 1 (PHYS 2414) (4 hours credit)



OPTION 3: ADVANCED STEM PATHWAY

2 years, half day. Juniors, finished with trigonometry and/or pre-calculus. EOC facilitates courses with Rose State College on behalf of students, to be taken via ITV on EOC campus. Potential for 32 hours of college credit.

Note: labs for Chemistry or Physics are in person on Rose State campus. The following college credits from Rose State also transfer to OSU, OU, UCO and more.

First year (Juniors) courses include:

- 1. Electronic/Digital Logic and Circuits with Arduino (RSC ENGT 1304) (4hrs credit)
- 2. Robotics and Coding (RSC ENGT 1214) (4hrs credit)
- 3. RSC Calculus 1 (MATH 1914) (4hrs credit)
- 4. RSC Calculus 2 (MATH 2924) (4hrs credit)

Second year (Seniors) courses include:

- 1. RSC Calculus 3 (MATH 2934) (4hrs credit)
- 2. RSC Differential Equations (MATH 2973) (3hrs credit)
- 3. RSC Engineering Chemistry (CHEM 1225) (5hrs credit)
- 4. RSC Engineering Physics 1 (PHYS 2434) (4hrs credit)

