

## PLTW Engineering Academy (152)

Course Type	Course Code	Course Title	Course Description	Post Secondary Connection
Introductory Course	O119/120	Leaders of the PACC	The Leaders of the PACC course is designed to promote and cultivate leadership skills that will serve the student invaluable in achieving his or her future academic and career goals. The course will be offered to any incoming freshmen that are willing and able to commit to a rigorous academic curriculum that will develop their abilities to be current leaders on campus as well as future leaders in their communities.	
Concentrator	IS414/415	PLTW Intro to Engineering	Designed for 9th or 10th grade students, the major focus of IED is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.	<b>Articulation Agreement:</b> Chaffey  A-G Approved
Capstone Course I	IS416/417	PLTW Principles of Engineering	Designed for 10th or 11th grade students, this survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions.	<b>Articulation Agreement:</b> Chaffey  A-G Approved
Capstone Course II	IS418/419	PLTW Engineering Design & Development	The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career.	A-G Approved