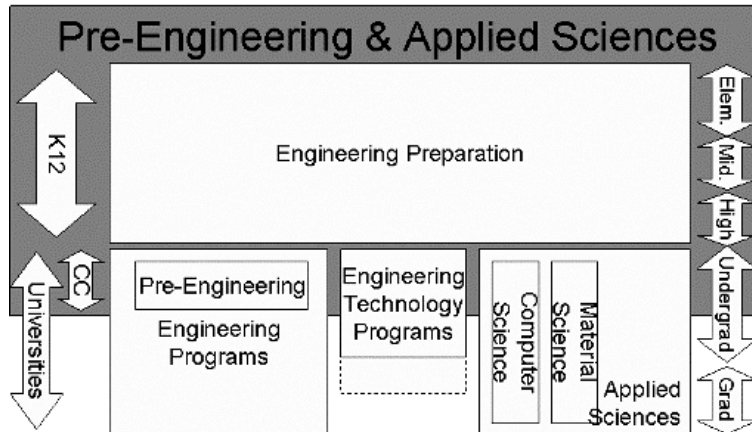


SUMMIT GLOSSARY



Alignment and Coordination: System-wide: Developing policies and practices throughout the educational system that increase the consistency between standards and assessment at one level with the prerequisites for the next level. Assuring that credit can be transferred regardless of whether the student plans on an associate degree or a four-year degree.

Alignment and Coordination: Curricula and Co-Curricula: Using best practices from the co-curricular world in classroom instruction and vice versa. Identifying ways that the two learning environments can complement each other and address the gaps in each system.

Applied Sciences: Educational programs that fall in between engineering programs and classical sciences. Generally, applied science programs are more focused on using science to solve practical problems than in preparing students to advance the state of knowledge in the field. In the context of the Summit applied sciences are those that focus on the creation and deployment of technology. Examples include computer science and material science.

Best Practices: Adapting and leveraging ideas from other states. Mapping the models and methods from successful programs in other states to address Oregon's challenges and needs.

Collegiate Level: Provides skills and information beyond what is normally gained at the secondary-school level. It is characterized by analysis, synthesis, and applications in which students demonstrate an integration of skills and critical thinking.

Co-curricular Programs: Programs that complement regular classroom instruction. These programs usually involve engaging students outside the regular school day and often emphasize outreach to under served populations.

Co-location: In a general sense, a community college and a four-year institution share facilities.

Degree Pathways: Describing the relationship of educational programs and integrated work experiences to careers. Effectively communicating this information to students to allow them to make informed and productive decisions. Pathways may provide multiple entry and exit points for students who cannot complete all their educational goals at one time and thus join the workforce after completing one or more levels with the possibility of returning to an educational program later.

Diversity: Increasing the ethnic and gender diversity in technical fields. Developing new strategies to attract diverse students. Enhancing and growing existing programs and methods to increase the diversity of students preparing for and succeeding in applied science and engineering education.

Dual Enrollment: A dual enrollment program has a single post-secondary application process, encourages students to co-enroll and to move freely between institutions, provides for packaging of credits for financial aid, and exists because of a signed dual enrollment agreement. Dual enrollment programs, sometimes referred to as co-admission programs, exist between certain community colleges and Oregon University System institutions.

Educational Service Districts: Oregon's twenty Education Service Districts (ESDs) provide a wide variety of education support services and programs to their component school districts. A few examples are staff development, testing, special education, and cooperative purchasing.

Engineering: Any of several careers and associated academic disciplines including but not limited to chemical engineering, civil engineering, computer engineering, electrical engineering, mechanical engineering, manufacturing, and nuclear engineering.

Engineering Preparation: At the middle-school and high-school level, students make take courses that help prepare them for collegiate-level engineering or applied-science courses. These courses include mathematics and science and may include computer programming, computer-aided design, etc. Advanced Placement, International Baccalaureate and similar programs may allow students to obtain college credit for advanced high-school coursework. Similarly, articulation agreements may allow students that successfully complete high-school courses to obtain credit for the equivalent college courses.

Engineering Programs: College programs that lead to a bachelor's and/or a graduate degree in engineering. These programs focus on theory and design and rely on a strong background in mathematics and science. Students in bachelor's degree programs acquire knowledge and skills that cover advanced calculus-based mathematics, natural and engineering sciences, and engineering principles and practices. They combine these with considerations of economic, social, environmental, and ethical issues to create new systems and products. Graduates are prepared for entry-level career positions in engineering or additional graduate-level education.

Engineering Technology Programs: Educational programs that qualify graduates to enter a technical field. Associate's degrees in engineering technology usually qualify graduates for entry-level positions as technicians. Such two-year programs are often offered at community colleges but are not interchangeable with pre-engineering programs at the same colleges. Bachelor's degrees in engineering technology programs typically qualify graduates for entry-level positions as engineers or technologists. These four-year programs are similar to undergraduate engineering programs except that are more focused on developing application skills. As such they may exploit less advanced mathematics and science and provide less preparation for graduate programs but feature a higher concentration of hands-on courses.

Instructional Professional Development: Increasing the capacity of teachers and faculty to deliver learning experiences that inspire and prepare students. Identifying and providing professional development programs and strategies that enhance their knowledge, skills, and mastery.

Lower Division: Courses taken by college freshmen and sophomores.

Marketing Engineering & Applied Science Careers: Increasing the number Oregonians interested in pursuing engineering and applied science as a career and gaining the education they need to successfully do so.

Pre-Engineering: At colleges and universities, pre-engineering programs are lower-division engineering courses that prepare students for upper-division engineering courses. At most universities a student must substantially complete a pre-engineering program before applying for admission to a professional program. Community colleges may offer pre-engineering programs that provides this same program of study.

Pre-Engineering & Applied Sciences: Curricula and experiences including engineering preparation, pre-engineering, engineering technology and applied science courses available to students in middle school, high school, and the first two years of college that motivates their interest in technical careers and prepares them for the next academic level and eventual careers in engineering, computer science, information technology, and material science.

Professional Program: At most universities, upper-division engineering courses are restricted to those that have completed the lower-division pre-engineering courses, applied for entry into the professional program, and been admitted into such a program.

Standards: Courses and Curricula: Improving standards and aligning courses to standards. Identifying gaps in curricula and course content to fill them. Continuous improvement to curriculum to assure the highest quality courses.

Strategic Plan: High-impact plans and recommendations for recruiting and allocating resources towards achieving high-level goals.

Student Success: Access, motivation, and retention: Identifying perceived barriers to access and developing strategies to increase student confidence in their ability to succeed. Identifying motivational and retention strategies that will inspire students to pursue engineering & applied science education and support these students in completing this education.

Summit: A meeting of the leaders of several organizations.

Upper Division: Courses taken by college juniors and seniors, usually requiring successful completion of lower-division pre-requisites.