Dennis Technical Education Center

Pre-Engineering

FACTS ...

- Designed for 11th and 12th grade students, the major focus of the our pre-engineering courses is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation.
- Students use 3D solid modeling design software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the community.

Abilities, Skills, and Knowledge

ABILITIES

- Good communication skills
- Problem solving
- Work in a team setting without supervision
- Work accurately and safely

SKILLS

- Understand and follow directions
- Use the four basic math operations
- Read and understand measurements
- Inspect products
- Solve realistic problems involving a few constants and many variables

KNOWLEDGE

- Understand engineering and mechanical technology
- Understand safety requirements

Fact Sheet

Career Opportunities Include:

Drafter
Architects
Civil Engineers
Engineering technicians
Landscape architects
Surveyors
Designers (commercial and industrial designers, interior designers, graphic designers)
Agricultural and food scientists
Environmental scientists
Urban planners

Just to name some of the jobs that are out there for you.

Significant Points

- Employment is projected to grow about as fast as the average for all occupations, although growth will vary by specialty; overall job opportunities for engineers are expected to be good.
- Starting salaries are among the highest of all college graduates.
- Continuing education is critical for engineers in order to keep up with improvements in technology.

Employment Outlook & Salary
Source: Department of Labor

Salary Ranges

OCCUPATION FIELD	Years of Education Needed	Openings per year	Entry Salary	ID Avg. Salary	NW Avg. Salary	U.S. Avg. Salary
• Drafter	2	175	$ 28,220	$ 30,340	-	$ 48,600
• Engineer	4	284	$ 48,140	$ 68,960	-	$ 78,560
• Architect	4	502	$ 36,520	$ 65,760	-	$ 76,750

2/9/12

Dennis Center Course Offerings

Overview:

PROGRAM/ YEARS	CREDITS	WEEKS
CEA	4	36
EDD	4	36

Program Description:

Civil Engineering and Architecture-This course is an introduction to Civil Engineering and Architecture and will emphasize the following: History, the influence and impact of architecture and the responsibilities of both fields including ethics and values. Students will be introduced to the stakeholders and role players involved. Students will consider the effects of past, present and future projects. Students will research architectural and civil engineering designs and produce models of their designs.

Engineering Design and Development-This course is an introduction to Civil Engineering and Architecture and will emphasize the following: History, the influence and impact of architecture and the responsibilities of both fields including ethics and values. Students will be introduced to the stakeholders and role players involved. Students will consider the effects of past, present and future projects. Students will research architectural and civil engineering designs and produce models of their designs.

College Credit Opportunities:

- CWI
- NNU

Program Costs:

- There is a $20 materials fee.

Program Selection Criteria:

Students are selected using the following criteria:

- Successful completion of Introduction to Engineering and Design and Principles of Engineering

Post-Secondary Education:

Tech Prep is a technical and academic post-secondary preparation program that enables students to earn college credits while still in high school. Tech Prep connects learning to career pathways and prepares students with technical skills, knowledge, and attitudes to enter high skill, high wage, or high demand occupations.

Transportation:

- This course is offered at the Dennis Technical Center. Bus transportation is provided to and from the home high school to off-campus sites.

Contact Us:

For more information about the programs offered by the Dennis Center, please contact us at:

Dennis Technical Education Center
Kyle Kallmeyer, Principal
8201 West Victory Road
Boise, Idaho 83709
208-854-5820
or visit us at: http://www.boiseschools.org/schools/tech_center.html