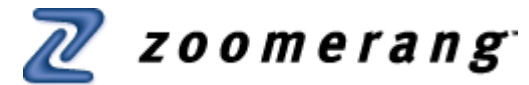


Engineering_and_CS_Student_Motivators_v4.4

Results Overview



Date: 10/16/2009 3:26 PM PST
 Responses: Completes
 Filter: No filter applied

In this survey "college major" is your probable choice of major, even if it is undeclared. The survey is broken into pages; you will need to click the "submit" button multiple times depending on your answers. Thanks!

1. Please rate these factors for how much they influenced your choice of major:




Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Little Influence	Some Influence	Large Influence	Does Not Apply
In-class experiences during the normal school day	89 13%	321 46%	258 37%	27 4%
Ongoing experiences outside the normal school day -- teams, clubs, classes, mentorships	149 21%	296 43%	217 31%	33 5%
Events: speakers, career & college fairs, field trips, campus visits, etc.	205 29%	299 43%	154 22%	37 5%
Internships, apprenticeships and on-the-job training	186 27%	141 20%	241 35%	127 18%

3. Which of these classes have you already taken, whether at your high school, community college or elsewhere:

Biology		569	82%
Calculus		433	62%
Chemistry		561	81%
Computer Science, web programming, and/or game design		250	36%
Engineering, CAD (computer-aided design or drafting) and/or electronics		279	40%
Physics		524	75%
Pre-calculus		568	82%
		73	11%

Robotics			
Science Research		63	9%



4. Was one or more of your high school engineering or design classes called "Project Lead The Way" (PLTW)? For example, Introduction to Engineering Design (IED), Principles of Electronics (POE), Digital Electronics?


















Yes		32	11%
No		188	67%
Don't know or not sure		59	21%
Total		279	100%

5. Rate the importance of these influences in your choice of college major:




Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Little influence	Some influence	Large influence	Does Not Apply
Lectures, demonstrations, and reading, in or out of the classroom	186 27%	348 50%	135 19%	26 4%
Hands-on activities, in or out of the classroom	71 10%	220 32%	389 56%	15 2%
Personal attention from and interaction with adults -- teachers, advisors, mentors, volunteers	93 13%	294 42%	288 41%	20 3%
Personal experiences with friends, family, job	93 13%	264 38%	325 47%	13 2%
Science, technology, engineering and/or math challenges & competitions	183 26%	230 33%	225 32%	57 8%
Visiting museums, science centers, preserves or field stations	251 36%	280 40%	111 16%	53 8%





















7. What was the focus of the organized activities you did outside of class that most influenced your choice of major, whether or not they were through your school? Please check all that apply:




Did not do organized activities outside of class		180	26%
Business and Careers clubs and competitions		58	8%

Computer science clubs and competitions		68	10%
Drama/Thespian (eg: theater, spoken word, video/film ...)		26	4%
Engineering other than robotics (ex: rocketry, car building ...)		166	24%
Forensics (eg: Speech & Debate, Mock Trial, Constitution Team, Model UN, ...)		28	4%
Leadership (eg: Student Government, Event committees,)		113	16%
Math clubs and competitions		94	14%
Music Performance (ex: band, choir, orchestra ...)		68	10%
Publications (eg: Yearbook, paper, website)		25	4%
Quiz game teams		25	4%
Robotics		81	12%
Science clubs and competitions		80	12%
Service clubs, activities, and events		90	13%
Strategy game clubs, competitions and events (ex: chess)		44	6%
Team Sports - competitive		237	34%
Team Sports - recreational		148	21%
Visual Arts (eg: painting, photography, graphic arts ...)		80	12%
Other, please specify		100	14%











8. What were the "brand names" of the organized activities that most influenced your choice of major (please check all that apply):

4-H Science Engineering Technology (SET) Projects like Tech Wizards		22	3%
4-H - other programs		98	14%
BEC Internships (Business Education Compact)		11	2%

FIRST LEGO League (FLL)		47	7%
FIRST Robotics Competition (FRC)		58	8%
FIRST Tech Challenge (FTC, previously known as FIRST VEX Challenge)		11	2%
Future Farmers of American (FFA)		38	5%
GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs)		16	2%
JETS (Junior Engineering Technical Society, National Engineering Design Competition)		8	1%
MESA (Math Engineering Science Achievement Clubs & Events)		39	6%
OGPC (Oregon Game Project Challenge)		7	1%
OMSI Volunteers -- Rising Stars and others		23	3%
OMSI Classes & Camps		109	16%
OSU Engineering Ambassadors		106	15%
Project Plus at PSU		17	2%
Saturday Academy Apprenticeships in Science & Engineering		16	2%
Saturday Academy camps & classes		33	5%
Science Bowl		64	9%
Science Fairs such as Northwest Science Expo (NWSE)		70	10%
Science Olympics		27	4%
SESEY (Summer Experience in Science and Engineering for Youth) at OSU		12	2%
SkillsUSA competitions		52	7%
SMILE (Science & Math Investigative Learning Experiences Clubs & Camps)		9	1%
TWIST (Teen Women in Science		6	1%

and Technology) at OIT			
Upward Bound at PSU		11	2%
Willamette University Programming Contest		9	1%

10. For those organized activities that were influential in your choice of major, please check all that apply:

I did some of these activities while I was in elementary school.		147	23%
I did some of these activities while I was in middle school.		247	39%
I did some of these activities while I was in high school.		445	70%
I did some of these activities during the normal school year.		292	46%
I did some of these activities during the summer.		240	38%
I had trouble finding the activities that I wanted to do most.		115	18%
I had trouble attending the activities that I wanted to do most because of the times they were offered.		52	8%
I had trouble attending the activities that I wanted to do most because of the locations they were offered.		52	8%
I had trouble attending the activities that I wanted to do most because the sessions were often full.		11	2%
I had trouble affording the activities that I wanted to do most.		54	8%

12. Thinking back to the in- and out-of-school activities that most influenced your choice of major, please rate the importance to you of these aspects:

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Little importance	Some importance	Large importance	Does Not Apply
A welcoming and comfortable	89	304	279	23

environment	13%	44%	40%	3%
Making friends and connections	84 12%	297 43%	287 41%	27 4%
Making an important contribution to the group effort	86 12%	289 42%	287 41%	33 5%
Community involvement (schools, volunteers, families, businesses ...)	195 28%	325 47%	121 17%	54 8%
Opportunities to work and learn as a team	83 12%	300 43%	284 41%	28 4%
Feeling challenged and growing into that challenge	38 5%	263 38%	381 55%	13 2%
Community recognition, exhibitions, competitions	251 36%	285 41%	92 13%	67 10%
Solving problems, hands-on work, learning by doing	16 2%	143 21%	527 76%	9 1%
Meeting professional scientists, technologists and engineers	129 19%	283 41%	248 36%	35 5%
Learning about science, technology, engineering and math	23 3%	188 27%	475 68%	9 1%
Learning about careers	107 15%	306 44%	262 38%	20 3%

In the following questions, if you check "Other, please specify" you must enter some text in the box to convince the survey engine you have answered. Thanks for your patience.

14. Please check all that apply to your heritage:




African		9	1%
Asian		92	13%
European (White)		547	79%
Hispanic/Latina/Latino		34	5%
Indian subcontinent		9	1%
Middle-Eastern		8	1%
Native American		33	5%
Pacific Islander		10	1%

Prefer not to answer		30	4%
Other, please specify		17	2%




15. Please check one to describe yourself:

male		586	85%
female		100	14%
prefer not to answer		8	1%



16. Your educational achievement -- please check all that apply:

First-year college student		546	79%
Transfer from a community college or other institution		124	18%
Other, please specify		38	5%

18. Do either of your parents have a bachelor's degree?

Yes		401	59%
No		237	35%
I don't know		36	5%
Total		674	100%

19. Your current campus:

Eastern Oregon University (EOU)		3	0%
Portland State University (PSU)		35	5%
Oregon Institute of Technology (OIT) - Klamath Falls		207	30%
Oregon Institute of Technology (OIT) - Portland (East & West)		0	0%

Oregon State University (OSU)		403	58%
Southern Oregon University (SOU)		1	0%
University of Oregon (UO)		1	0%
Western Oregon University (WOU)		0	0%
Other, please specify		45	6%
Total		695	100%

20. Your chosen major at OIT Klamath Falls is:

Computer Engineering Technology		29	14%
Civil Engineering		38	18%
Electrical Engineering		17	8%
Embedded Systems Engineering Technology		3	1%
Geomatics		16	8%
Manufacturing Engineering Technology		2	1%
Mechanical Engineering		33	16%
Mechanical Engineering Technology		7	3%
Renewable Energy Engineering		33	16%
Software Engineering Technology		20	10%
Other		9	4%
Total		207	100%


21. Your current chosen major at OIT Portland is:

Computer Engineering Technology		0	0%
Civil Engineering		0	0%
Electrical Engineering		0	0%
Embedded Systems Engineering		0	0%

Technology			
Geomatics		0	0%
Manufacturing Engineering Technology		0	0%
Mechanical Engineering		0	0%
Mechanical Engineering Technology		0	0%
Renewable Energy Engineering		0	0%
Software Engineering Technology		0	0%
Other		0	0%
Total		0	0%

22. Your current chosen major at OSU is:



Bioengineering		11	3%
Chemical Engineering		28	7%
Civil Engineering		61	15%
Computer Science		32	8%
Construction Engineering Management		7	2%
Ecological Engineering		3	1%
Electrical & Computer Engineering		55	14%
Engineering Physics		13	3%
Environmental Engineering		22	5%
General Engineering		40	10%
Industrial Engineering		7	2%
Manufacturing Engineering		3	1%
Mechanical Engineering		103	26%
Nuclear Engineering		8	2%
Radiation Health Physics		3	1%

Other		7	2%
Total		403	100%

23. Your current chosen major at PSU is:

Civil Engineering		0	0%
Computer Engineering		1	3%
Computer Science		4	11%
Electrical Engineering		22	61%
Environmental Engineering		0	0%
Mechanical Engineering		9	25%
Other		0	0%
Total		36	100%

24. Your current chosen major at EOU is:

Computer Science/ Multimedia Studies		1	50%
Pre-Engineering		1	50%
Other		0	0%
Total		2	100%