

Roles BME students take in their organizations?

Job Title	Description
Instrument Scientist	Part of the engineering group; research and develop instrumentation and processes related to cell/tissue culture to enable more efficient pharmaceutical discovery.

What technical skills do they look for in BME students?

Job Title	Skill	Expectation Level			
		Freshman	Sophomore	Junior	Senior
Instrument Scientist	Cell/Tissue Culture	None	Introductory Experience	Conducting work in a laboratory	Mastery
Instrument Scientist	Robotics/Automation	None	None	Introductory courses	Basic Electrical Engineering Skills
Instrument Scientist	Prototyping	Introductory Experience/ 100 level design	Competence	Able to design prototype and take into account design modifications	Proficient, Some solid Works experience
Instrument Scientist	LabView	None	Introductory Experience	Competence; able to navigate LabView	Able to design programs on LabView without assistance; proficient
Instrument Scientist	Matlab	None	Introductory Experience (in-class)	Able to program on matlab; competence	Proficient with Matlab; able to write programs on your own

Stakeholder: Large Pharmaceutical Company

Instrument Scientist	Microscopy/Image Processing	None	Introductory Experience (class)	Conducting microscopy work in a lab	Proficient in microscopy. Can adapt for unique situations, able to conduct image analysis
Instrument Scientist	Technical Writing and Presentations	Introductory Experience/ Course in Technical Communication	Be able to present	Competency in technical communication	Mastery

What soft skills do they look for in BME students?

Soft Skill	Description
Learning	Be able to easily learn new concepts/skills and adapt
Teamwork	Act as a liaison between scientists and engineers (non-bioengineer)
Expertise/Perspectives	Ability to provide fresh, new perspectives and expertise to the team.

Notes (Note any additional points that were discussed, but not covered above):

Engineering department had a very diverse set of engineers (primarily mechanical and electrical engineers) with expertise differing from employee to employee, so they brought a lot of that expertise, so that the biomedical engineers can focus more on biological challenges and skills.