So what is an internship?

- An internship is technical work experience designed for students. Engineering internships are nearly always paid work experiences.

- Students work on projects which require applications of their engineering skills. The nature of the projects vary greatly from company to company but often involve process studies, special testing, statistical analysis, data acquisition and analysis, development of training manuals, safety, etc.

- Students work in industry, government, or at universities in undergraduate research programs (REU)
Where do CBEE students work?

- Students can work for corporations, government agencies or universities.
- Number of students with internships is going back up after a low in 2009.
- OSU summer research positions have been a significant employer of CBEE students.
### What industries employ CBEE interns?

<table>
<thead>
<tr>
<th>Industry</th>
<th>Interns</th>
<th>Leading Intern Employers</th>
<th>MECOP Students</th>
<th>Leading MECOP Employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio / Pharmaceuticals</td>
<td>14</td>
<td>Life Technologies, Bend Research, Bayer Healthcare, Genentech</td>
<td>6</td>
<td>Oregon Freeze Dry, Carestream Health</td>
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<td>Wineries</td>
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<td>E.J. Gallo</td>
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<td>Chemical Processing</td>
<td>11</td>
<td>Emerald Kalama, Pacific BioDiesel, Ashland Chemical, Monsanto</td>
<td>3</td>
<td>Linde</td>
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<tr>
<td>Pulp and Paper</td>
<td>10</td>
<td>Georgia Pacific, Longview Fibre, International Paper</td>
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<td>Georgia Pacific</td>
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<tr>
<td>Plant Design / Process Control</td>
<td>4</td>
<td>CH2M Hill, ANR Group, Johnson Controls</td>
<td>3</td>
<td>CH2M Hill</td>
</tr>
<tr>
<td>Water / Wastewater</td>
<td>1</td>
<td>CH2M Hill</td>
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<td>Oil and Gas</td>
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<td>Shell Oil</td>
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<tr>
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<td>WaferTech</td>
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<td>Siltronics, Intel, ON Semiconductors, SolarWorld, Novellus, Rogue Valley Microdevices</td>
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<td>Electronic Materials</td>
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<td>Metals and Materials</td>
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<td>7</td>
<td>Selmet, Wah Chang, Toyo Tanso</td>
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<tr>
<td>Miscellaneous</td>
<td>9</td>
<td>Nalco</td>
<td>11</td>
<td>Boeing, Viasystems, Frito Lay, Medallion Cabinets</td>
</tr>
</tbody>
</table>

NOTE: This is 2010 and 2011 internship data.
CBEE interns also work for government agencies

Students have worked for government agencies including:

- NASA
- Oregon Department of Transportation
- National Institute of Health
- Portland Bureau of Environmental Services
- Portland Water Bureau
- PNNL (Pacific Northwest National Laboratory)
- Army Research Lab
- National Institute of Health
- Tribes of the Umatilla, WISE (through AiChE),
- State of Oregon PROMISE
CBEE students do university research

- These opportunities are called an REU - Research Experience for Undergraduates

- REUs are hosted by universities across the US, including OSU, and are usually funded by the National Science Foundation or another government agency.

- A group of undergraduate students is hosted by the university and given the opportunity to do research along side graduate students and researchers.

- REUs include stipends and sometimes travel and living expenses.

- Many students have worked for the Subsurface Biosphere Initiative at OSU and for HHMI also at OSU (Subsurface Biosphere Initiative has ended).

- REU information is posted on the website and reminders are sent to the CBEE-jobs mailing list. Late fall and early winter terms are when most REUs are accepting applications. Be sure to check the start dates – some start in early May and will not work for OSU students.

- OSU CBEE students participated in REU programs at universities other than OSU. These universities have included MIT, University of Washington, several University of California locations, Stanford, Johns Hopkins and others. Both sophomores and juniors have received REU internships.
Where were the internships located?

These charts include data from the last 3 summers. The employment locations have been similar for these years; before that there were more opportunities in Portland for industry and government internships.
How do you increase your chances of getting an internship?

- **Be flexible & open minded.** Consider going someplace you wouldn’t want to live forever. Apply for jobs that are not directly in your field of interest (especially if this will be your first internship).

- **Be persistent.** Start early; some companies only hire fall term. But remember there are still good internships that become available throughout the school year. Some companies wait until spring term to make internships available.

- **Apply for an REU.** (research experience for undergraduate students) at a university or a program run by a government lab or agency. These are especially good opportunities for anyone possibly interested in graduate school. REUs do require good GPAs and professor recommendations.

- **Get a job (any job) this summer.** Many employers prefer to hire students with some work experience.

- **Get involved!** Do something other than go to class. Most employers are looking for someone who is involved in the university or other interests.
What can you do after your first year?

- Most engineering employers want students who have finished their second or third year in engineering.

- **Work hard at any job you can get.** This will help you when you are looking for an internship. Many employers have told me they prefer interns with work experience of any type.

- **Apply for a Johnson Internship.** Johnson Internships are for students who have completed their first year in CBEE. You apply late winter term. Most interns work for CBEE professors, these are paid internships but they are funded privately by a generous alumni (Pete Johnson). More information about this opportunity can be found at: [http://cbee.oregonstate.edu/students/prospective/scholarships/applying.html](http://cbee.oregonstate.edu/students/prospective/scholarships/applying.html)
What resources are available?

- Register for Beaver JobNet, check it and the NACELink site regularly.

- **Read the CBEE internship webpage** to learn about local employers and lots of information about where you can search for jobs. [http://cbee.oregonstate.edu/students/internships/](http://cbee.oregonstate.edu/students/internships/)

- **Attend the OSU Career Services Career Fairs.** Attend both Fall and Winter terms with many copies of your resume. Research companies offering internships in your field before you attend. Follow-up with likely employers.

- **Attend the information sessions/pizza feeds organized by CBEE club.** Some companies visit the department for an evening information session followed by interviews in the department the next day. This is a good way to learn about what is involved in a summer internship at that company. Look for information on-line and on posters around Gleeson.

- **Join the list-serve** for students interested in CBEE internships. When new opportunities become available they are mailed to the list-serve. To sign up go to [https://secure.engr.oregonstate.edu/mailman/listinfo/cbee-jobs](https://secure.engr.oregonstate.edu/mailman/listinfo/cbee-jobs).

- **Read the CBEE Bulletin.** It is e-mailed to all CBEE students.