

Employer Roles

Promoting career awareness

Foster communication & engagement between employers & academia

- Alumni, alumni boards, local/regional employers
 - External speakers for talks, seminars, classes – real-world perspectives, applications, career opportunities
 - Short or mock interviews & discussion of current members of workforce their jobs - online or in person
 - Talks by returning interns about experiences, corporate culture, values
 - Take advantage of opportunities - some contractors for federal agencies must spend certain amount of their budget on engaging with institutions

Promoting career awareness

Collaboration and expectation setting

- Provide advice on skills needed for employment, assistance & resources
- Clear communication about work culture and expectations
 - What skills you are expected to have; which skills you will gain during employment
- Manage cultural/language issues of prospective employees
- Employers that target specific schools should be clear with departments & students on what they are looking for in new employees
- Companies/industry/agencies that support research at an academic institution should provide recommendations for training in certain areas or internships

Employer Roles

- **Internship Experiences**

 - **Critical entry points for graduates into companies & agencies**

 - Companies/agencies should partner with academic institutions
 - Need to raise awareness of opportunities & importance for employment
 - Need more mentoring during internships, final assessment & feedback to departments
 - Faculty should encourage students to do internships
 - Develop countermeasures for students doing internships – increases time to graduation
 - need release time to allow career development; role of online courses?

- **Other career experiences**

 - Externships (with/without academic credit), shadowing
 - Company, government agency/lab, site visits, field excursions
 - Participation in Career Fairs/Days

Employer Roles in Education

- **Employers provide course content**
 - Project ideas or datasets for real-world cost/benefit/risk projects
 - Employer evaluation & feedback, mentoring
- **Teaching**
 - Company employees & retirees teach classes
 - Joint courses using curriculum/internal training for interns & new employees or continuing education for employees; online or in person
 - Experiential learning opportunities – co-lead and co-teach field trips
 - Sponsor short-courses
 - Adjunct lecturers from private sector – co-taught courses, seminars, etc.
 - Online courses that can be connected across institutions for training purposes; online dissemination; continuing education
- **Financial support**
 - Direct contract to fund a student for advanced degree, partnerships, forming a research consortium
 - Financial aid and scholarships to universities – philanthropy
 - Funding field camps or trips – employees participate in the camps – gives experiential opportunities for both employer and students

Opportunities for Involvement

- Help students decide whether their career goals are better met with a Masters or Ph.D.
- Work with faculty to integrate professional skills into their teaching approach
 - Hire an education specialist to work directly with faculty to adapt their teaching style and approach
- Work with faculty to revise curricula to incorporate training in professional skills
- Assist with team-based cross-disciplinary, longer-term projects for student groups to work on together (e.g. Imperial Barrel)
- Provide career counselors/advisors with training to provide more uniform guidance on nontechnical, professional skills
- Provide funding for training programs in data analytics, machine learning, AI