

# BEST PRACTICES GUIDELINES

## For Student Chapters of the Earthquake Engineering Research Institute

This document includes recommendations to facilitate the success of your EERI Student Chapter. Be sure to visit the EERI Student Chapters page to learn more from the annual reports of other chapters.

### MISSION AND GOALS

Develop clear and concrete goals for the year (e.g., three invited speakers, two outreach activities, etc.)

### LEADERSHIP AND MEMBERSHIP

#### OFFICERS

The Board should consist of the following members that are selected via annual elections:

- President
- Vice President
- Treasurer
- Secretary

In addition to your four core officers, consider other positions such as:

- Seismic Design Competition (SDC) Team Captain
- Virtual Earthquake Reconnaissance Team (VERT) Captain
- Corporate/Professional Coordinator
- Education/Outreach Coordinator
- Historian
- Webmaster

#### FACULTY & INDUSTRY ADVISORS

Seek guidance and maintain regular contact (via quarterly meetings or calls) with both your Faculty Advisor and Local Professional EERI Member Contact. They can be valuable resources, especially when designing activities or securing guest speakers.

#### MEMBERSHIP

Advertise your EERI Student Chapter with flyers, in-class/email announcements, and/or a social media.

Encourage students to [become an EERI member](#) for only \$25 per year. Student membership benefits include:

- Lectures from experts through the Friedman Family Visiting Professional Program or the Distinguished Lectures Series;
- Opportunities for student recognition via the EERI Seismic Design Competition, Undergraduate and Graduate Student Paper Contests, as well as the EERI/FEMA/NEHRP Graduate Fellowship;
- Support to attend EERI Annual Meetings through reduced registration rates for all student members and Travel Grants to students selected through a competitive application process;
- Internships for recent graduates to work year-around at EERI's office on program/projects;
- One-year free EERI Young Professional membership after graduation and reduced rates for an additional four years;

- Online access to *Earthquake Spectra*; and more!

## CHAPTER ACTIVITIES

Consistently host regular chapter meetings and other chapter activities, both professional and social, to engage members!

### REGULAR CHAPTER MEETINGS

Regular chapter meetings should be structured with a predetermined agenda to maintain attendance.

### PROFESSIONAL ACTIVITIES

Invite speakers or host seminars to engage your EERI Student chapter membership. Specifically, you can:

- Apply to the EERI's Friedman Family Visiting Professional Program for a visit from an expert professional/academic (expenses paid for by EERI), program description at <https://www.eeri.org/projects/friedman-family-visiting-professionals-program/> ;
- Contact the EERI Younger Members Committee at [ymc@eeri.org](mailto:ymc@eeri.org) to request a visit from a young professional/ academic;
- Invite local earthquake engineering professionals/academics to give a lecture or lead a workshop on campus (OR) to arrange local office, laboratory, or construction site visits;
- Plan a Post-Earthquake Reconnaissance Workshop (PERW) modelled after the event hosted by the Student Leadership Council (SLC) at the EERI Annual Meeting, for assistance contact [slc@eeri.org](mailto:slc@eeri.org) ;
- Develop a multi-disciplinary seminar or panel that brings together structural/geotechnical/civil engineers, social scientists, urban planners, earth scientists, emergency managers, etc.;
- Arrange a mini-symposium (short presentations or posters) where undergraduate and graduate students can present to peers on their on-going research in earthquake engineering fields; and
- Monitor department and college calendars to advertise visiting lecturers who are presenting on earthquake-related topics.

When external speakers visit, consider developing a complete itinerary that in addition to a lecture given by the speaker, include lab or facility tours, roundtable discussions with students, and/or lunch or dinner.

### EDUCATION AND OUTREACH ACTIVITIES

Connect to the community by engaging in education and outreach activities:

- Host outreach events with K-12 students through tours and demonstrations on-campus in your laboratory facilities, or teach a module followed by a hands-on activity. For lesson ideas:
  - Contact the SESI Classroom Education & Outreach Subcommittee for lesson ideas and visit the SESI Website: <https://www.eeri.org/projects/schools/>.
  - See what other student chapters have done: <https://www.eeri.org/about-eeri/student-chapters/>. Examples:
    - Shake Table Demo (see U-British Columbia 2014-2015 Annual Report)
    - After School Outreach (see U-Colorado Boulder 2014-15 Annual Report, pg. 6)
    - Accepted Students Day (see U-Colorado Boulder 2014-15 Annual Report, pg. 6)
- Have booths with hands-on activities and visual aids at university-sanctioned or other local science events such as your College of Engineering Open House.
- Participate in Virtual Earthquake Reconnaissance Team (VERT) efforts described on the Younger Member Committee website at <https://ymc.eeri.org/virtual-earthquake-reconnaissance-team-vert/> .

## ADDITIONAL ACTIVITIES

In addition to regular chapter meetings, make the most of your chapter experience with additional activities:

- Host an Earthquake Spectra Book Club that meets monthly to discuss articles from EERI's journal: <http://earthquakespectra.org/?code=eeri-site>.
- Plan social events such as potluck or barbecue, outdoor or sporting activities, etc.

## SEISMIC DESIGN COMPETITION TEAM

Participate in the annual EERI Seismic Design Competition (SDC) as a team of undergraduates with mentorship from graduate students. Ensure your team has clearly assigned roles, and carefully manage goals and deadlines. Seek financial support from your university and local engineering firms.

## USEFUL RESOURCES

- SAP2000 brief: <https://slc.eeri.org/aboutsdsc/>
- SAP2000 tutorial videos: <https://www.youtube.com/watch?v=2povDdw2pTQ&t=350s>

## ROLE OF THE GRADUATE STUDENT SDC MENTOR

- Provide guidance and mentorship
- Help team maintain schedule
- Seismic Design "Crash Course" (see [Virginia Tech 2017-18 Annual Report, pg. 4](#))
- Plan basic earthquake engineering lectures (see [NCSU 2015-16 Annual Report, pg. 5](#))
- Plan SAP2000/ETABS tutorial (see [U-Illinois 2015-16 Annual Report, pg. 6-7](#))
- Train students in shake table operation
- Train students in data acquisition with accelerometers

## STAY CONNECTED TO EERI

Engage as a Student Chapter with EERI:

- Confirm your details are updated on the EERI Student Chapter webpage, including social media links;
- Maintain a Chapter Website based on the EERI template or utilize social media (Twitter, Facebook, etc.);
  - <https://www.facebook.com/EERI.SLC/>
- Connect with your local [EERI Regional Chapter](#) to coordinate activities and networking opportunities;
- Attend EERI's Annual Meeting to participate in the Seismic Design Competition, give a poster or oral presentation, and network with earthquake engineering professionals;
- Contribute to earthquake clearinghouses through the Virtual Earthquake Reconnaissance Team (VERT);
- Engage with the EERI Student Leadership Council (<https://slc.eeri.org/>) and the Young Members Committee (<https://ymc.eeri.org/>);
- Submit your Annual Report by May 1st and tell us all about your year!

## FREQUENTLY ASKED QUESTIONS

The following questions were submitted by existing EERI Student Chapters, and the answers provided were developed by the EERI Younger Members Committee. If you would like to submit additional questions, please email [ymc@eeri.org](mailto:ymc@eeri.org).

1. How can EERI Student Chapters make the professional activities/lectures both technically rigorous and inclusive to undergraduates?
  - Check class schedules to make sure the time slot is suitable for the majority of interested students.
  - Advertise the events in classrooms. In-person announcements before class starts are ideal.
  - Offer free food and be sure to advertise the free food.
  - Offer extra credit on homework, if professors are on board.
  - Host discussions before or after meeting to engage students.
2. How can EERI Student Chapters in areas typically considered "non-seismic" get an array of speakers (not just faculty, grad students, or alumni of their school involved in earthquake engineering) to come to present content specifically on earthquake engineering beyond the Friedman Family Visiting Professional visit?
  - Utilize faculty connections.
  - Express interest in the YMC Google form: <https://ymc.eeri.org/join-ymc/>.
3. How can EERI Student Chapters and SDC teams improve continuity year-to-year?
  - Ensure that at least one of the elected student chapter leaders is a junior-status or younger.
  - Recruit freshman explicitly to ensure early engagement.
  - Continue to engage younger student chapter members by delegating responsibilities and opportunities.
  - Engage a faculty advisor.
  - Reach out to EERI Student Chapter alumni from your university for guidance.
4. How can EERI Student Chapters seek out corporate funding to support travel to the Annual Meeting and SDC competition?
  - Solicit funding from firms and companies for whom SDC team members have interned.
  - Seek an industry advisor. Utilize faculty and department connections to find interested mentors.
  - Solicit support from material companies (balsa wood company, etc.)
  - Solicit alumni support via the department newsletter.