



SAWE Mentoring Program Charter

Preamble

Mass Properties is a specialized subset of Systems Engineering that is not generally taught in college or university courses. Unlike many engineering disciplines, mass properties engineering encompasses the whole gamut of a project - from conceptualization, consecutively through all design phases, manufacturing, test, deployment, operations, until final disposal. During all this activity, mass properties engineers must display both technical competence and the ability to engage in mutually cooperative interactions with each engineering discipline participating in the project.

The successful mass properties engineer always should be able to interact harmoniously with their co-workers. And finally, the mass properties engineer needs to find an appropriate balance between their work necessities and a flourishing personal life. Like most of the technical aspects of the mass properties engineering job, these other aspects of the practice of mass properties engineering are not part of a secondary education. They must be learned once the engineer has started working.

All aspects – the technical work, successfully navigating interpersonal working relationships, and maintaining a work-life balance can be facilitated by a meaningful relationship with a more experienced individual. This facilitation is the premise behind the SAWE's Mentoring Program, which pairs those who wish to progress (mentees) with experienced and/or expert mass properties engineers (mentors).

The Mentoring Program shall comply with all applicable laws, including International Trafficking in Arms Regulations (ITAR), national, state, and local laws.

Purpose of the SAWE Mentoring Program

The Society of Allied Weight Engineers is implementing a Mentoring Program that shall engage experienced mass properties engineers (mentors) in aiding mass properties engineers (mentees) in growing their engineering skill set. Additionally, mentors can provide advice on how to interact amicably with co-workers, deal with setbacks, expand their professional network, stimulate their personal and professional growth, and balance their work life with their non-work life to enable the mentees to thrive.

The program will lay out a series of steps that will match mentees with potential mentors and ensure that compatibility is established early in the mentee/mentor relationship.

The result will be well-balanced mass properties engineers that understand the profession and have the necessary work and life skills to flourish.

Note that as one means of fulfilling the requirement for renewal of the Mass Properties Engineering Certificate is to be a mentor, this aspect cannot be ignored.



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The SAWE Mentoring Committee

A committee, appointed by the President and consisting of senior members in good standing with the SAWE shall be the core of the SAWE Mentoring Committee. The Executive Director, the current SAWE President, Vice President - Technical Director, the SAWE Vice President - Certification, and the SAWE Past-President shall be standing members of the committee.

Duties of the Mentoring Committee include development and maintenance of the Mentoring Program, oversight of registration, adjudicating conflicts between mentors and mentees, monitoring the progress of mentees, acknowledgement of a mentor/mentee pair's completion of their mentoring relationship, and for the purpose of fulfilling Mass Properties Certification requirements - documenting mentor/mentee collaborations.

Mentoring Program Promotion

The SAWE Mentoring Committee shall promote and otherwise advertise the existence of the SAWE Mentoring Program. This should include blogs on the SAWE and associated websites, SAWE monthly bulletins, articles in the SAWE Journal, a dedicated webpage that includes information regarding the program with links for registration and resources, and prominence at conferences.

Registration

Both Mentors and Mentees will formally enter the program by registering via the SAWE website. The SAWE requires both Mentors and Mentees to be SAWE members in good standing for the duration of their mentoring relationship. The SAWE will solicit senior members to join the ranks of mentors. Members interested in becoming mentors may also contact the SAWE Mentoring Committee via the website.

The Mentoring pages on the SAWE website shall have means of registering as either a Mentor or a Mentee. Potential participants shall complete a standard online application. These applications will gather information regarding experience in mass properties, prior mentoring experience (if applicable), and mentee desired mentoring, among other information. A mentee may register for multiple sessions with different topics or desired outcomes (technical, work-life balance, and/or relationships).

Registrations will be analyzed by the Mentoring Committee to aid in Mentor/Mentee matching. The Mentoring Committee will create a database of Mentors and Mentees with this information.

Cost

Mentoring is free of charge for the mentee, mentoring is voluntary and receives no compensation.



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Types of Mentoring

The needs of our SAWE members for mentoring can be categorized as Technical or Non-Technical. Mentors have expertise and/or experience in the technical aspects of mass properties engineering and experiences that are non-technical. Mentees may have needs that are technical, non-technical or both.

Technical Mentoring

Throughout a mass properties engineer's career, there may be times when the engineer needs help with technical aspects of their job, or they may just be interested in learning about some aspect. This is where Technical Mentoring shines. Technical Mentors, those with experience and known expertise in specific mass properties activities are instrumental in sharing knowledge with mentee(s). Examples are abundant, including methods of inventorying a unit under test, weighing knowledge – including pitfalls to avoid, calculation of various mass properties, inertia determination, and determination of growth allowances, creating a mass properties control program, to name a few. In general, if the mentoring encompasses technical aspects of mass properties, the mentee should seek a technical mentor with experience in such aspects.

Non-Technical Mentoring

In today's world, many engineers find themselves having trouble coping with non-technical aspects of their work and life. This can be interpersonal conflicts, time management, work-life balance, conflicting demands, money worries – the list can be quite extensive. Mentors likely have had similar experiences and can offer helpful advice to ease their mentees through what may seem to be a crisis. Mentors functioning as non-technical Mentors have an obligation to maintain the privacy of their mentee(s), and when reporting on progress, **MUST** ensure that no personal or private information is shared. Any reporting should be general while expressing whether progress is being made towards resolution. For those seeking non-technical mentoring, at no time shall private journals, emails, or mentee templates (see below) be shared without specific consent of both the mentee and mentor.

Mentee/Mentor Matching

The committee shall create a list of mentors with the mentor's field(s) of expertise. This list shall be comprised of those potential mentors who sign up as mentors through the registration process, plus those who are recommended as potential mentors by the Mentoring Committee. Those who are solicited by the Mentoring Committee shall be contacted and asked to register as mentors. Mentors should register as Mentors. All mentors will be sorted by their areas of technical expertise. Mentors and Mentees will be assigned an ID that does not personally identify the mentor.



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Based on the stated goal(s) of the mentee as indicated in the application, the mentee will be provided with a list of mentors by Mentor ID that match their goal(s). The mentee should be advised that a mentor need not be in the same industry, and that different perspectives can be a plus. The mentee will request one or more mentoring relationship(s) via an online form. The Mentoring Committee will adjudicate the mentor request based on the completed application and the availability of the mentor. The committee will then contact potential mentors with the mentoring request from the mentee. If the mentor agrees to the request, the committee will then and only then pass the mentor's contact information to the mentee. It is incumbent on the mentee to contact potential mentors by phone and/or email. If the mentor and mentee decide to engage in a mentoring relationship, the mentor will then inform the committee so that the committee may track the progress of the mentor/mentee relationship. The committee will note the relationship and open a mentoring relationship between the mentor and mentee on a designated form that will facilitate tracking and progress towards completion of the relationship.

Engagement

It shall be up to the mentee to initiate the relationship; therefore, the mentee begins by contacting the mentor and summarizing their expectations. The mentor should set discussion agendas based on the mentee's expectations. The mentors and mentees shall agree to how frequently they will meet and chat. The mentor shall guide the mentee towards the achievement of the mentee's expectations. It is not expected or desired that the mentor should perform the mentee's job or task, but rather to instruct and advise the mentee as required to achieve the goal.

Growth

The mentee shall update their mentor on their progress in desired areas of growth and identify new challenges. Conversely, the mentor shall assess the mentee's progress and growing expertise, noting such progress for reporting to the committee.

Supporting Mentor/Mentee Relationships

It is incumbent on the committee to ensure that the mentee is comfortable and satisfied with the relationship with their chosen mentor. After the pairing has been made, the SAWE Mentoring Committee shall implement checks to monitor the mentorship. If the match is not compatible, the Mentoring Committee will suggest an alternate mentor upon notification from the mentee.



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Reporting Progress

As noted above, mentors shall assess their mentee's progress and inform the committee of such progress. Personal information should not be shared, particularly if the goals of the mentoring sessions are not technical.

The committee shall devise a template to be used by mentees to document the mentoring sessions. This template will be used by the mentee to document their own progress. The mentee and the mentor should agree that the information documented on the form is correct. This documentation will not be shared without the consent of both the mentor and mentee. However, the mentor can use the documentation to convey in general terms the progress of their mentee, which shall be shared with the committee. If the mentoring is non-technical, neither the documentation nor the information, even in general terms, shall be shared without the express consent of the mentee.

Completion

The mentoring shall be considered completed if the mentee and mentor agree that:

- The defined expectations have been fulfilled or
- The sessions do not advance as expected.

Once the mentee and mentor agree that the mentoring is complete, the mentor and/or the mentee shall give feedback to the committee via a post-mentoring questionnaire. Any documentation created by the mentee and mentor shall be stored by mentor and mentee. The post-mentoring questionnaire will be used for improving the Mentoring Program, assessing training needs of our members, and documenting the success of the Program.

Mass Properties Engineering Certification

One means of fulfilling the requirement for renewal of the Mass Properties Engineering Certificate is to be a mentor.

If required, the SAWE Certification Authority Deputy for Certification Maintenance may contact the Mentoring Committee for validation.