



Item	Requirement	AMPE Initial Certification	AMPE In-Service Requirements Over the 5 years between certifications
0.00	Validity	Cross-Industry	Cross-Industry
1.00	Minimum Application Requirements		
1.10	Application forwarded	Yes	Yes
1.11	Application reviewed	Yes	Yes
1.15	Application Fee paid	Yes	Yes
1.20	Work	5 years of cumulative (independent of elapsed time of years) MPE experience or 2 years of applicable Mass Properties Engineer experience and completion of a BS/BE STEM degree	During the five-year period since the issue of the last certificate: 1 year of cumulative MPE experience. or ONE achievement (see 1.40 to 1.43)
1.30	SAWE Membership	Current	Current
1.32	SAWE Code of Ethics ⁷⁾	Honored	Honored
1.40	Knowledge Sharing		
1.41	Min. effort	Not applicable	During the five-year period since the issue of the last certificate: 40h per achievement, content must be significantly related to Mass Properties.
1.42	Quantity	Not applicable	Work experience (see 1.20) or ONE achievement.
1.43	Achievements		- Publications
			o Create or revise SAWE Technical Paper.
			o Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.
			o Create or revise SAWE or other society MPE Recommended Practice or Standard.
			o Create or revise Textbook/Handbook section.
			o Working in a cross-company working group publishing a RP.
			- Training
			o Take, create, revise or deliver SAWE Training Class.



			<ul style="list-style-type: none"> - Mentoring <ul style="list-style-type: none"> o Be a mentee in a finished mentoring activity or mentor 1 SAWE member. - Certification <ul style="list-style-type: none"> o Create 10 approved and non-repetitive questions with answers, covering at least 5 subjects. - Committee <ul style="list-style-type: none"> o 2 years in a SAWE leadership role.¹⁾ o Other committees if pre-approved by VP CMPE. - Other contribution to Mass Properties <ul style="list-style-type: none"> o Create or deliver SAWE Forum. o Create innovations including patents. o Give lectures in Universities or Trade schools. o Other contributions if pre-approved by VP CMPE.
1.60	New Developments in Mass Properties	Included in exam.	A written statement that AMPE possesses sufficient knowledge.
2.00	Exam Requirements		
2.01	Exam Fee paid ⁶⁾	Yes	Not applicable
2.02	Recertification Fee paid	Not applicable	Yes
2.10	Multiple Choice Test		
2.11	No. of questions	Appr. 80	Not applicable
2.12	Duration	2h	Not applicable
2.13	Soft skills included	Not applicable	Not applicable
2.14	Pass Criteria	70%	Not applicable

¹⁾ SAWE Leadership is defined for the purposes of PMPE and EMPE certification as: elected international officer, appointed officer by the President, his deputy VPs, appointed committee chairs by an elected officer, standing committee chair, special committee chair, S&P Industry Committee co-chair, Technical Committee member, Deputy VPs Certification and Team Members, Chapter Officer if the chapter holds 6 meeting during the tenure.

⁶⁾ The certificate will only be issued after receiving the payment. The exam can be taken before.

⁷⁾ In case of violation against the SAWE Code of Ethics all certificates will be revoked.



Item	Requirement	PMPE Initial Certification ³⁾	PMPE In-Service Requirements ⁸⁾ Over the 5 years between certifications
0.00	Validity	Industry-specific	Industry-specific
1.00	Minimum Application Requirements		
1.10	Application forwarded	Yes	Yes
1.11	Application reviewed	Yes	Yes
1.15	Application Fee paid	Yes ²⁾	Yes
1.20	Work	- 5 years of cumulative (independent of elapsed time of years) MPE experience. - Checking work of associates.	During the five-year period since the issue of the last certificate: - 2 years of cumulative (independent of elapsed time of years) MPE experience. - Checking work of associates.
1.21	Projects	- 2 projects with at least 2 phases each (pre-proposal, proposal, design, production, testing or operation). - Leading a project in a MP-role during one or more phases (solely responsible for a significant portion of a project).	- 1 project with at least 2 phases each (pre-proposal, proposal, design, production, testing or operation). - Leading a project in a MP-role during one or more phases (solely responsible for a significant portion of a project).
1.30	SAWE Membership	Maintained	Maintained
1.31	Pre-Requisite certification ²⁾	Hold an AMPE certification for 1 year.	Not Applicable
1.32	SAWE Code of Ethics ⁷⁾	Honored	Honored
1.40	Knowledge Sharing		
1.41	Min. effort	40h per achievement, content must be significantly related to Mass Properties.	During the five-year period since the issue of the last certificate: - 40h per achievement, content must be significantly related to Mass Properties.
1.42	Quantity	At least ONE	At least ONE during the five-year period.
1.43	Achievements	- Publications	- Publications
		o Create or revise SAWE Technical Paper.	o Create or revise SAWE Technical Paper.
		o Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.	o Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.
		o Create or revise SAWE or other society MPE Recommended Practice or Standard.	o Create or revise SAWE or other society MPE Recommended Practice or Standard.
		o Create or revise Textbook/Handbook section.	o Create or revise Textbook/Handbook section.
		o Working in a cross-company working group publishing a RP.	o Working in a cross-company working group publishing a RP.



Minimum Requirements for Application and Exam v260322

		<ul style="list-style-type: none"> - Training <ul style="list-style-type: none"> o Create, revise or deliver SAWE Training Class. - Mentoring <ul style="list-style-type: none"> o Mentor 2 SAWE member. - Certification <ul style="list-style-type: none"> o Create 10 approved and non-repetitive questions with answers, covering at least 5 subjects. - Committee <ul style="list-style-type: none"> o 2 years in a SAWE leadership role.¹⁾ o Other committees if pre-approved by VP CMPE. - Other contribution to Mass Properties <ul style="list-style-type: none"> o Create or deliver SAWE Forum. o Create innovations including patents. o Give lectures in Universities or Trade schools. o Other contributions if pre-approved by VP CMPE. 	<ul style="list-style-type: none"> - Training <ul style="list-style-type: none"> o Create, revise or deliver SAWE Training Class. - Mentoring <ul style="list-style-type: none"> o Mentor 2 SAWE member. - Certification <ul style="list-style-type: none"> o Create 10 approved and non-repetitive questions with answers, covering at least 5 subjects. - Committee <ul style="list-style-type: none"> o 2 years in a SAWE leadership role.¹⁾ o Other committees if pre-approved by VP CMPE. - Other contribution to Mass Properties <ul style="list-style-type: none"> o Create or deliver SAWE Forum. o Create innovations including patents. o Give lectures in Universities or Trade schools. o Other contributions if pre-approved by VP CMPE.
1.50	Workflow Essay ²⁾	1 essay on a predefined question/task will be required in application. Content will be judged by Application Review Team.	Not Applicable
1.60	New Developments in Mass Properties	Included in exam.	SAWE documented self-learning (Papers, Presentations, Publications, Forums or MP101).
2.00	Exam Requirements		
2.01	Exam Fee paid ⁶⁾	Yes	Not applicable.
2.02	Recertification Fee paid	Not applicable	Yes
2.10	Multiple Choice Test ²⁾		
2.11	No. of questions	50	Not applicable
2.12	Duration	Appr. 1:15h	Not applicable
2.13	Soft skills included	Yes	Not applicable
2.14	Pass Criteria	70%	Not applicable

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- 2) Until the industry-specific exam becomes available this requirement is not valid. Applicants agree with their application to take the exam and supply the workflow essay latest with 1 year after it becomes available.
- 3) Until the industry-specific exam becomes available PMPE can be proposed by any member of the SAWE and will be nominated by the Application Review Team if all application requirements except the workflow essay are met.
- 6) The certificate will only be issued after receiving the payment. The exam can be taken before.
- 7) In case of violation against the SAWE Code of Ethics all certificates will be revoked.
- 8) For PMPE and EMPE nominated before 01.01.2024 additional requirements for recertification exist. They will be notified in due time.



Item	Requirement	EMPE Initial Certification * 5)	EMPE In-Service Requirements ⁹⁾
			Over the 5 years between certifications [*]
0.00	Validity	Industry-specific	Industry-specific
1.00	Minimum Application Requirements		
1.10	Application forwarded	Yes	Yes
1.11	Application reviewed	Yes	Yes
1.15	Application Fee paid	Yes ²⁾	Yes
1.20	Work	- 10 years of cumulative (independent of elapsed time of years) MPE experience. - Set goals for two projects.	During the five-year period since the issue of the last certificate: - 3 years of cumulative (independent of elapsed time of years) MPE experience during the five-year period. - Set goals for one project.
1.21	Projects	- 2 projects with at least 4 phases each (pre-proposal, proposal, design, production, testing or operation). - Leading a project in a MP-role during one or more phases (solely responsible for a significant portion of a project).	- 1 project with at least 2 phases each (pre-proposal, proposal, design, production, testing or operation). - Leading a project in a MP-role during one or more phases (solely responsible for a significant portion of a project).
1.30	SAWE Membership	Maintained	Maintained
1.31	Pre-Requisite certification ²⁾	Hold an PMPE certification for 1 year.	Not Applicable
1.32	SAWE Code of Ethics ⁷⁾	Honored	Honored
1.40	Knowledge Sharing		
1.41	Min. effort	40h per achievement, content must be significantly related to Mass Properties.	During the five-year period since the issue of the last certificate: - 40h per achievement, content must be significantly related to Mass Properties.
1.42	Quantity	At least TWO	At least TWO during the five-year period.
1.43	Achievements	- Publications	- Publications
		o Create or revise SAWE Technical Paper.	o Create or revise SAWE Technical Paper.
		o Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.	o Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.
		o Create or revise SAWE or other society MPE Recommended Practice or Standard.	o Create or revise SAWE or other society MPE Recommended Practice or Standard.
		o Create or revise Textbook/Handbook section.	o Create or revise Textbook/Handbook section.
		o Working in a cross-company working group publishing a RP.	o Working in a cross-company working group publishing a RP.
		- Training	- Training



Minimum Requirements for Application and Exam v260322

		<ul style="list-style-type: none"> ○ Create, revise or deliver SAWE Training Class. - Mentoring ○ Mentor 2 SAWE member. - Certification ○ Create 10 approved and non-repetitive questions with answers for PMPE- or EMPE-exams, covering at least 5 subjects. - Committee ○ 2 years in a SAWE leadership role.1) ○ Other committees if pre-approved by VP CMPE. - Other contribution to Mass Properties ○ Create or deliver SAWE Forum. ○ Create innovations including patents. ○ Give lectures in Universities or Trade schools. ○ Other contributions if pre-approved by VP CMPE. 	<ul style="list-style-type: none"> ○ Create, revise or deliver SAWE Training Class. - Mentoring ○ Mentor 2 SAWE member. - Certification ○ Create 10 approved and non-repetitive questions with answers for PMPE- or EMPE-exams, covering at least 5 subjects. - Committee ○ 2 years in a SAWE leadership role.1) ○ Other committees if pre-approved by VP CMPE. - Other contribution to Mass Properties ○ Create or deliver SAWE Forum. ○ Create innovations including patents. ○ Give lectures in Universities or Trade schools. ○ Other contributions if pre-approved by VP CMPE.
1.50	Workflow Essay ⁴⁾	1 essay on a predefined question/task will be required in application.	Not Applicable.
1.60	New Developments in Mass Properties	Included in exam.	- SAWE documented self-learning (Papers, Presentations, Publications, Forums or MP101). and - Develop a SAWE documented self-learning (Papers, Presentations, Publications, Forums or MP101) or agree to be a mentor on the new development.
2.00	Exam Requirements		
2.01	Exam Fee paid ⁶⁾	Yes	Not Applicable
2.02	Recertification Fee paid	Not Applicable	Yes
2.10	Multipile Choice Test ⁴⁾		
2.11	No. of questions	50	Not Applicable
2.12	Duration	Appr. 1:15h	Not Applicable
2.13	Softskills included	Yes	Not Applicable
2.14	Pass Criteria	70%	Not Applicable

* will be refined

¹⁾ SAWE Leadership is defined for the purposes of PMPE and EMPE certification as: elected international officer, appointed officer by the President, his deputy VPs, appointed committee chairs by an elected officer, standing committee chair, special committee chair, S&P Industry Committee co-chair, Technical Committee member, Deputy VPs Certification and Team Members, Chapter Officer if the chapter holds 6 meeting during the tenure.



- 4) Until the industry-specific exam becomes available this requirement is not valid. Applicants agree with their application to take the exam and supply the workflow essay latest with 2 years after it becomes available.
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