

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 Re	equirements	
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	1 year of cumulative MPE experience during the five-year period. or ONE product (see 1.40 to 1.43)
		experience and completion of a BS/BE STEM degree	ONE product (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	40h per product, content must be significantly related to Mass
1.42	Quantity	Not applicable	Work experience (see 1.20) or ONE product during the five-year
1.43	Products	Not applicable	- Take, create, revise or deliver SAWE Training Class
			- Create or revise SAWE Technical Paper.
			- Create or revise other Technical Publication that is peer reviewed by
			- Create or revise SAWE or other society MPE Recommended
			- Create or revise Textbook/Handbook section.
			- Create or deliver SAWE Forum.
			- Create 10 approved and non-repetitive questions with answers,
			- Create innovations including patents.
			- Be a mentee in a finished mentoring activity or mentor 1 SAWE
			- Give lectures in Universities or Trade schools.
			- Working in a cross-company working group publishing a RP.
			- Alternatives include:
			- 2 years in a SAWE leadership role.1)
			- 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 Req	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. Checking work of associates. 	 2 years of cumulative (independent of elapsed time of years) MPE experience during the five-year period. 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	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 product, content must be significantly related to Mass Properties.	40h per product, content must be significantly related to Mass Properties.	
1.42	Quantity	At least ONE	At least ONE during the five-year period.	
	Products	- Create, revise or deliver SAWE Training Class	- Create, revise or deliver SAWE Training Class	
		- Create or revise SAWE Technical Paper.	- Create or revise SAWE Technical Paper.	
		- Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.	- Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.	
1.43		- Create or revise SAWE or other society MPE Recommended Practice.	- Create or revise SAWE or other society MPE Recommended Practice or Standard.	
		- Create or revise Textbook/Handbook section.	- Create or revise Textbook/Handbook section.	
		- Create or deliver SAWE Forum.	- Create or deliver SAWE Forum.	
		- Create 10 approved and non-repetitive questions with answers for PMPE- or EMPE-exams, covering at least 5 subjects.	- Create 10 approved and non-repetitive questions with answers for PMPE- or EMPE-exams, covering at least 5 subjects.	
		- Create innovations including patents.	- Create innovations including patents.	



		- Mentor 2 or more AMPE or PMPE candidates.	- Mentor 2 SAWE members.
		- Give lectures in Universities or Trade schools.	- Give lectures in Universities or Trade schools.
		- Working in a cross-company working group publishing a RP.	- Working in a cross-company working group publishing a RP.
		- Alternatives include:	- Alternatives include:
		- 2 years in a SAWE leadership role.1)	- 2 years in a SAWE leadership role.1)
		- Other contributions if pre-approved by VP CMPE.	- 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, if needed support from experts in the industry will be sought.	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.

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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.



ltem	Requirement	EMPE Initial Certification * 5)	EMPE In-Service Requirements ⁸⁾	
			Over the 5 years between certifications*	
0.00	Validity	Industry-specific	Industry-specific	
1.00	Minimum Application Req	uirements		
1.10	Application forwarded	Yes	Yes	
1.11	Application reviewed	Yes	Yes	
1.15	Application Fee paid	Yes	Yes	
1.20	Work	- 10 years of cumulative (independent of elapsed time of years) MPE experience.	- 3 years of cumulative (independent of elapsed time of years) MPE experience during the five-year period.	
		- Set goals for two projects.	- 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	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 product, content must be significantly related to Mass Properties.	40h per product, content must be significantly related to Mass Properties.	
1.42	Quantity	At least TWO	At least TWO during the five-year period.	
	Products	- Create, revise or deliver SAWE Training Class	- Create, revise or deliver SAWE Training Class	
		- Create or revise SAWE Technical Paper.	- Create or revise SAWE Technical Paper.	
		- Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.	- Create or revise other Technical Publication that is peer reviewed by SAWE or the other society.	
		Create or revise SAWE or other society MPE Recommended Practice.	- Create or revise SAWE or other society MPE Recommended Practice or Standard.	
1.43		- Create or revise Textbook/Handbook section.	- Create or revise Textbook/Handbook section.	
0		- Create or deliver SAWE Forum.	- Create or deliver SAWE Forum.	
		- Create 10 approved and non-repetitive questions with answers for PMPE- or EMPE-exams, covering at least 5 subjects.	- Create 10 approved and non-repetitive questions with answers for PMPE- or EMPE-exams, covering at least 5 subjects.	
		- Create innovations including patents.	- Create innovations including patents.	
		- Mentor 2 or more AMPE, PMPE or EMPE candidates.	- Mentor 2 SAWE members.	
		- Give lectures in Universities or Trade schools.	- Give lectures in Universities or Trade schools.	



		- Working in cross-company working groups resulting in RPs missing	- Working in cross-company working groups resulting in RPs missing
		- Alternatives include:	- Alternatives include:
		- 2 years in a SAWE leadership role.1)	- 2 years in a SAWE leadership role.1)
		- Other contributions if pre-approved by VP CMPE.	- 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

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