



Associate Mass Properties Engineer Certification Requirements

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	<ul style="list-style-type: none"> • 5 years of cumulative MPE specific experience (independent of elapsed years) or • 2 years of applicable MPE experience and completion of a BS/BE STEM degree 	Not Applicable
1.30	SAWE Membership	Current	Current
1.32	SAWE Code of Ethics ⁷⁾	Honored	Honored
2.00	Exam Requirements		
2.01	Exam Fee paid ⁶⁾	yes	yes
2.10	Multiple Choice Test		
2.11	No. of questions	Approximately 80	Only if significant new developments in Mass Properties.
2.12	Duration	2h	Only if significant new developments in Mass Properties.
2.13	Soft skills included	no	no
2.14	Pass Criteria	70%	70%

* Will be refined

⁶⁾ The certificate will only be issued after receipt of the payment, but the exam may be taken before.

⁷⁾ Violation of the SAWE Code of Ethics will result in all certificates being revoked.



Professional Mass Properties Engineer Certification Requirements

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	yes
1.20	Work	<ul style="list-style-type: none"> 5 years of cumulative MPE specific experience (independent of elapsed years). Responsible for checking the work of associates. 	<ul style="list-style-type: none"> 2 years of cumulative MPE experience (independent of elapsed years) during the five-year period. Responsible for checking the work of associates.
1.21	Project	<ul style="list-style-type: none"> 2 projects with at least 2 phases each (pre-proposal, proposal, design, production, testing or operation). Leading a project in a Mass Properties role during one or more phases (solely responsible for a significant portion of a project). 	<ul style="list-style-type: none"> 1 project with at least 2 phases each (pre-proposal, proposal, design, production, testing or operation). Leading a project in a Mass Properties role during one or more phases (solely responsible for a significant portion of a project).
1.30	SAWE Membership	Maintained	Maintained
1.31	Prerequisite 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	Minimum 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 of the products below:	At least ONE of the products below during the five-year period:
1.43	Product	<ul style="list-style-type: none"> Create, revise, or deliver SAWE Training Class Create or revise SAWE Technical Paper. Create or revise other Technical Publication that is peer reviewed by SAWE or another professional society. Create or revise SAWE or other society MPE Recommended Practice. Create or revise Textbook/Handbook section. 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 innovations including patents. Mentor 2 or more AMPE or PMPE candidates. Give lectures in Universities or Trade schools. 	<ul style="list-style-type: none"> Create, revise, or deliver SAWE Training Class Create or revise SAWE Technical Paper. Create or revise other Technical Publication that is peer reviewed by SAWE or another professional society. Create or revise SAWE or other society MPE Recommended Practice. Create or revise Textbook/Handbook section. 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 innovations including patents. Mentor 2 or more AMPE or PMPE candidates. Give lectures in Universities or Trade schools.



Professional Mass Properties Engineer Certification Requirements

Item	Requirement	PMPE Initial Certification ³⁾	PMPE In-Service Requirements ⁸⁾ Over the 5 years between certifications*
		<ul style="list-style-type: none"> Work in cross-company working groups resulting in RP creation or update. Alternatives include: <ul style="list-style-type: none"> 2 years in a SAWE leadership role.¹⁾ Other contributions if pre-approved by VP CMPE. 	<ul style="list-style-type: none"> Work in cross-company working groups resulting in RP creation or update. Alternatives include: <ul style="list-style-type: none"> 2 years in a SAWE leadership role.¹⁾ Other contributions if pre-approved by VP CMPE.
1.5	Workflow Essay ²⁾	<ul style="list-style-type: none"> 1 essay on a predefined question/task will be required in the application. Content will be judged by the Application Review Team, and, if needed, support from experts in the industry will be sought. 	<ul style="list-style-type: none"> 1 essay on a predefined question/task will be required in the application. Content will be judged by the Application Review Team, and, if needed, support from experts in the industry will be sought.
2.00	Exam Requirements		
2.01	Exam Fee paid ⁶⁾	yes	yes
2.10	Multiple Choice Test ²⁾		
2.11	No. of questions	50	TBD if significant new developments in Mass Properties.
2.12	Duration	Appr. 1:15h	TBD if significant new developments in Mass Properties.
2.13	Soft skills included	yes	yes
2.14	Pass Criteria	70%	70%

* 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 meetings during the applicant's tenure.

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 within 1 year after it becomes available.

³⁾ Until the industry-specific exam becomes available, a PMPE can be proposed by any member of the SAWE and will be promoted at the discretion of the Application Review Team if all application requirements except the workflow essay are met.

⁶⁾ The certificate will only be issued after receipt of the payment, but the exam may be taken before.

⁷⁾ Violation of the SAWE Code of Ethics will result in all certificates being revoked.

⁸⁾ For PMPEs and EMPEs nominated before 01.01.2024, additional requirements for recertification exist. They will be notified in due time.



Expert Mass Properties Engineer Certification Requirements

Item	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 Requirements		
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 MPE experience (independent of elapsed years). Lead a department or set goals for multiple projects.	3 years of cumulative MPE experience (independent of elapsed years) during the five-year period. Lead a department or set goals for multiple projects.
1.21	Project	<ul style="list-style-type: none"> 2 projects with at least 4 phases each (pre-proposal, proposal, design, production, testing or operation). Lead a project in a Mass Properties role during one or more phases (solely responsible for a significant portion of a project). 	<ul style="list-style-type: none"> 1 project with at least 4 phases each (pre-proposal, proposal, design, production, testing or operation). Lead a project in a Mass Properties role during one or more phases (solely responsible for a significant portion of a project).
1.30	SAWE Membership	Maintained	Maintained
1.31	Prerequisite 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 of the products below:	At least TWO of the products below during the five-year period.
1.43	Product	<ul style="list-style-type: none"> Create, revise, or deliver SAWE Training Class Create or revise SAWE Technical Paper. Create or revise other Technical Publication that is peer reviewed by SAWE or another professional society. Create or revise SAWE or other society MPE Recommended Practice. Create or revise a Textbook/Handbook section. 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 innovations including patents. Mentor 2 or more AMPE, PMPE or EMPE candidates. 	<ul style="list-style-type: none"> Create, revise, or deliver SAWE Training Class Create or revise SAWE Technical Paper. Create or revise other Technical Publication that is peer reviewed by SAWE or another professional society. Create or revise SAWE or other society MPE Recommended Practice. Create or revise a Textbook/Handbook section. 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 innovations including patents. Mentor 2 or more AMPE, PMPE or EMPE candidates.



Expert Mass Properties Engineer Certification Requirements

Item	Requirement	EMPE Initial Certification * 5)	EMPE In-Service Requirements ⁸⁾ Over the 5 years between certifications*
		<ul style="list-style-type: none"> Give lectures in Universities or Trade schools. Work in cross-company working groups resulting in RP creation of update. Alternatives include: <ul style="list-style-type: none"> 2 years in a SAWE leadership role.¹⁾ Other contributions if pre-approved by VP CMPE. 	<ul style="list-style-type: none"> Give lectures in Universities or Trade schools. Work in cross-company working groups resulting in RP creation of update. Alternatives include: <ul style="list-style-type: none"> 2 years in a SAWE leadership role.¹⁾ Other contributions if pre-approved by VP CMPE.
1.5	Workflow Essay ⁴⁾	1 essay on a predefined question/task will be required in the application. Content will be judged by the Application Review Team, and, if needed, support from experts in the industry will be sought.	1 essay on a predefined question/task will be required in the application. Content will be judged by the Application Review Team, and, if needed, support from experts in the industry will be sought.
2.00	Exam Requirements		
2.01	Exam Fee paid ⁶⁾	yes	yes
2.10	Multiple Choice Test ⁴⁾		
2.11	No. of questions	50	TBD if significant new developments in Mass Properties.
2.12	Duration	Approximately 1 h:15m	TBD if significant new developments in Mass Properties.
2.13	Softskills included	yes	yes
2.14	Pass Criteria	70%	70%

* 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 meetings during the applicant's 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 within 2 years after it becomes available.

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