



## Metallurgical and Materials Engineering PROFESSIONAL ENGINEER (PE) LICENSING EXAM REVIEW COURSE



## PLANNED TOPICS (AS OF 7/21/2025)

1 Introductions and Exam Format Review Charles White 7/22 1:00pm -1:30pm 0.5 hrs 2 Processing and Phase Diagrams I Charles White 7/22 1:30pm -2:30pm 1 hr 4 Mechanical Performance States of Stress Eric Weishaupt 7/22 2:45pm -4:15pm 1.5 hrs 15 hrs Stress 2 Basic Crystal Structure. Imperfection Slip Systems 5 Basic Crystal Structure. Imperfection Slip Systems 6 Ellen Wright 7/22 4:30pm -5:00pm 0.5 hrs 15 hrs 16 hrs 15 hrs 16 hrs 16 hrs 17 hrs 17 hrs 17 hrs 17 hrs 17 hrs 17 hrs 18 hrs 17 hrs 18 hrs 17 hrs 18 hrs 17 hrs 18 hrs 17 hrs 19 hrs 15 hrs 17 hrs 18 hrs 17 hrs 19 hrs 15 hrs 17 hrs 19 hrs 15 hrs 17 hrs 18 hrs 19 hrs 15 hrs 18 hrs 19 hrs	Unit	Торіс	Instructor	Date	Time (EDT)*	Duration
3 Processing and Phase Diagrams II   Charles White   7/22   1:30pm - 2:30pm   1 hr	1	Introductions and Exam Format Review	Charles White	7/22	1:00pm - 1:30pm	0.5 hrs
4Mechanical Performance States of StressEric Weishaupt7/222.45pm - 4.15pm1.5 hrs5Basic Crystal Structure. Imperfection Slip SystemsEllen WrightOn-Demand1.5 hrsn/aOffice HoursWhite. Weishaupt & Wright7/224:30pm - 5:00pm0.5 hrs6StatisticsSteve SopherOn-Demand1.5 hrs7Nondestructive TestingErik Mueller7/242.45pm - 4:45pm2 hrs8Characterization and Chemical AnalysisErik MuellerOn-Demand1.5 hrs10Office HoursSopher & Mueller7/245:00pm - 5:30pm0.5 hrs9Corrosion: Mechanisms. Environmental Compatibility. Design IChartes White & Ellen WrightOn-Demand1.5 hrs10Corrosion: Mechanisms. Environmental Compatibility. Design IIChartes White & Ellen Wright7/291:00pm - 3:00pm2 hrs12Fracture Mechanics. Joining ProcessesEric Weishaupt7/293:15pm - 4:45pm1.5 hrs12Practure Mechanics. Joining ProcessesEric Weishaupt7/293:15pm - 4:45pm1.5 hrs13Office HoursWhite, Weishaupt & Wright7/295:00pm - 5:30pm0.5 hrs14Temp-Dependent Behavior. Diffusion. and WearErik MuellerOn-Demand1.5 hrs15Ceramics and CompositesErik Mueller7/300-Demand1.5 hrs16Surface TreatmentCharles White7/311.45pm - 3:15pm1.5 hrs16Surfac	2	Processing and Phase Diagrams I	Charles White	On-Demand		1.5 hrs
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19         Wrap Up         Charles White         7/31         3:30pm - 4:30pm         1 hr	18	<del>                                     </del>	Erik Mueller	On-Demand		1.5 hrs
	19	Wrap Up	Charles White			1 hr
	n/a	<del>                                     </del>	Mueller & White	7/31	4:45pm - 5:15pm	0.5 hrs

<sup>\*</sup> Live instruction will be recorded and made available the next day via the TMS PE Review Course website. Contact ProfessionalDevelopment@tms.org for more information.