



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

PLANNED TOPICS (AS OF 7/21/2025)

Unit	Topic	Instructor	Date	Time (EDT)*	Duration
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	On-Demand		1.5 hrs
3	Processing and Phase Diagrams II	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
5	Basic Crystal Structure, Imperfection Slip Systems	Ellen Wright	On-Demand		1.5 hrs
n/a	Office Hours	White, Weishaupt & Wright	7/22	4:30pm - 5:00pm	0.5 hrs
6	Statistics	Steve Sopher	On-Demand		1.5 hrs
6	Statistics	Steve Sopher	7/24	On-Demand	1.5 hrs
7	Nondestructive Testing	Erik Mueller	7/24	2:45pm - 4:45pm	2 hrs
8	Characterization and Chemical Analysis	Erik Mueller	On-Demand		1.5 hrs
n/a	Office Hours	Sopher & Mueller	7/24	5:00pm - 5:30pm	0.5 hrs
9	Corrosion: Mechanisms, Environmental Compatibility, Design I	Charles White & Ellen Wright	On-Demand		1.5 hrs
10	Corrosion: Mechanisms, Environmental Compatibility, Design II	Charles White & Ellen Wright	7/29	1:00pm - 3:00pm	2 hrs
12	Fracture Mechanics, Joining Processes	Eric Weishaupt	7/29	3:15pm - 4:45pm	1.5 hrs
n/a	Office Hours	White, Weishaupt & Wright	7/29	5:00pm - 5:30pm	0.5 hrs
11	Plastics & Polymers	Steve Sopher	7/30	On-Demand	1.5 hrs
13	Intro to Temp-Dependent Behavior, Diffusion, and Wear	Erik Mueller	On-Demand		1.5 hrs
14	Temp-Dependent Behavior & Standards	Erik Mueller	7/30	2:45pm - 4:15pm	1.5 hrs
15	Ceramics and Composites	Eric Weishaupt	On-Demand		1.5 hrs
n/a	Office Hours	Sopher & Mueller	7/30	4:30pm - 5:00pm	0.5 hrs
16	Surface Treatment	Charles White	7/31	12:00pm - 1:30pm	1.5 hrs
17	Failure Analysis; Fatigue & Fracture	Erik Mueller	7/31	1:45pm - 3:15pm	1.5 hrs
18	Microstructures	Erik Mueller	On-Demand		1.5 hrs
19	Wrap Up	Charles White	7/31	3:30pm - 4:30pm	1 hr
n/a	Office Hours	Mueller & White	7/31	4:45pm - 5:15pm	0.5 hrs

* 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.