

CERTIFICATE IN ALUMINUM PROCESS METALLURGY

The Aluminum Process Metallurgy Certificate is a specialized program designed to equip professionals, engineers, and students with foundational and advanced knowledge of aluminum and its alloys. Aluminum is a critical material in transportation, aerospace, construction, packaging, and renewable energy due to its light weight, corrosion resistance, and recyclability. The certificate focuses on key topics such as aluminum production, alloy design, microstructural characterization, mechanical behavior, corrosion resistance, and processing techniques, including casting, forming, heat treatment, and welding.

Requirements for the Certificate in Aluminum Process Metallurgy

Code	Title	Hours
MEEN 305	Materials Science & Engineering	3
MEEN 360	Manufacturing and Materials Selection in Design	3
MEEN 361	Manufacturing and Materials in Design Laboratory	1
MEEN 402	Aluminum Process Metallurgy I	3
MEEN 403	Aluminum Process Metallurgy II	3
ENGR 431	Engineering Internship I	3
Total Hours		16