

TO: The Engineering Faculty
FROM: The Faculty of the School of Materials Engineering
DATE: February 9, 2022
RE: Fast track prerequisite change for MSE 382

The faculty of the School of Materials Engineering has approved the following change to the prerequisites for MSE 38200. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From: **MSE 38200 - Mechanical Response Of Materials**
Prerequisites: MSE 25000, MA 26500 (or MA 26200)

Catalog Description. This course encompasses deformation-based microscopic mechanisms, including dislocation motion, diffusion, and viscoplasticity. Macroscopic mechanical response of metals, ceramics, polymers, and composites will be related to elasticity and plasticity concepts for single crystal, polycrystalline, and amorphous materials. Practical design considerations for deformation will be included as well as an introduction to fracture mechanisms. Typically offered Spring.

To: **MSE 38200 - Mechanical Response Of Materials**
Prerequisites: MSE 230 (or CE 23100 or NUCL 3200), MSE 25000 (or CE 27000 or ME 27000 or NUCL 27300), MA 26500 (or MA 26200)

Catalog Description. This course encompasses deformation-based microscopic mechanisms, including dislocation motion, diffusion, and viscoplasticity. Macroscopic mechanical response of metals, ceramics, polymers, and composites will be related to elasticity and plasticity concepts for single crystal, polycrystalline, and amorphous materials. Practical design considerations for deformation will be included as well as an introduction to fracture mechanisms. Typically offered Spring.

Reason: The course is part of the MSE Minor and noting the equivalent prerequisites removes barriers to scheduling.



David F. Bahr, Professor and Head
School of Materials Engineering