Minor and ASI in Electrical Engineering

Minor in Electrical Engineering

A minimum of 18 credits are required for a Minor in Electrical Engineering as follows. (See Minor program section of the catalog for all rules for minors at Mines.)

Students must complete an 18-credit sequence as described below for a minor in EE. All students seeking a minor in EE will need to take EENG281/EENG282 (4 credits) and EENG307 (3 credits) after which they complete the remaining minor requirements.

1. Information Systems and Science (ISS), 18 credits

EENG281 & EENG282	ELECTRICAL CIRCUITS and ELECTRICAL CIRCUITS LABORATORY	4.0
EENG307	INTRODUCTION TO FEEDBACK CONTROL SYSTEMS	3.0
EENG284	DIGITAL LOGIC	4.0
EENG310	INFORMATION SYSTEMS SCIENCE I	3.0
EENG311	INFORMATION SYSTEMS SCIENCE II	3.0
EENG391	FIELD SESSION – COMPUTATIONAL METHODS FOR ELECTRICAL ENGINEERS	1.0

2. Power and Energy Systems (PES), 18 credits

EENG281 & EENG282	ELECTRICAL CIRCUITS and ELECTRICAL CIRCUITS LABORATORY	4.0
EENG307	INTRODUCTION TO FEEDBACK CONTROL SYSTEMS	3.0
EENG385	ELECTRONIC DEVICES AND CIRCUITS	4.0
EENG386	FUNDAMENTALS OF ENGINEERING ELECTROMAGNETICS	3.0
EENG389	FUNDAMENTALS OF ELECTRIC MACHINERY	4.0

3. Integrated Circuits and Electronics (ICE), 18 or 20 credits

EENG281 & EENG282	ELECTRICAL CIRCUITS and ELECTRICAL CIRCUITS LABORATORY	4.0
or EENG281 & MEGN300	ELECTRICAL CIRCUITS and INSTRUMENTATION & AUTOMATION	
EENG307	INTRODUCTION TO FEEDBACK CONTROL SYSTEMS	3.0
EENG284	DIGITAL LOGIC	4.0
EENG383	EMBEDDED SYSTEMS	4.0
EENG421	SEMICONDUCTOR DEVICE PHYSICS AND DESIGN	3.0
or EENG423	INTRODUCTION TO VLSI DESIGN	

4. General Electrical Engineering, 19 or 21 credits

EENG281 & EENG282	ELECTRICAL CIRCUITS and ELECTRICAL CIRCUITS LABORATORY	4.0
or EENG281 & MEGN300	ELECTRICAL CIRCUITS and INSTRUMENTATION & AUTOMATION	
EENG307	INTRODUCTION TO FEEDBACK CONTROL SYSTEMS	3.0
EENG284	DIGITAL LOGIC	4.0
EENG310	INFORMATION SYSTEMS SCIENCE I	3.0
EENG385	ELECTRONIC DEVICES AND CIRCUITS	4.0
EENG391	FIELD SESSION – COMPUTATIONAL METHODS FOR ELECTRICAL ENGINEERS	1.0