Kingdom of Saudi Arabia
Ministry of Education
University of Bisha
College of Engineering
Dept. of Electrical Engineering



المملكة العربية السعودية وزارة التعليـــــم جامعة بيشة

> كلية الهندسة قسم الهندسة الكهربائية

## Course Syllabus

Course Code and Name	EE 26333 — Analog and Digital Electronic Circuits
Credit and contact hours	3 (2, 1, 1) (Lecture, Tutorial, Lab)
Required or Elective	Required
Level / Year	Level (6) / Year (3)
Course Prerequisite	EE 26222 Electric Circuits-1 EE 26231 Fundamental of Electronic Devices
Textbook	Sedra and K. Smith, Microelectronic Circuits, Oxford University Press, 2009.
Course Description	This course cover the following topics: Review of basic BJT amplifiers - Feedback Amplifiers - Multistage amplifiers - Operational Amplifiers (Op-Amps) - Analog building blocks using Op-Amps - Determination of type and order of the filter needed to meet the specifications - External characteristics of Op-Amps - Operation and design of linear analog circuits using Op-Amps - Nonlinear OP-AMP circuits - Digital-to-analog and analog-to-digital converters - Digital ICs - Digital Circuits
Brief List of Topics to be Covered	<ol> <li>Introduction to optical communication</li> <li>Review of basic BJT amplifiers</li> <li>Feedback Amplifiers</li> <li>Multistage amplifiers</li> <li>Operational Amplifiers (Op-Amps)</li> <li>Analog building blocks using Op-Amps.</li> <li>Determination of type and order of the filter needed to meet the specifications</li> <li>External characteristics of Op-Amps</li> <li>Operation and design of linear analog circuits using Op-Amps</li> <li>Nonlinear OP-AMP circuits</li> <li>Digital-to-analog and analog-to-digital converters</li> <li>Digital ICs</li> <li>Digital Circuits</li> </ol>
Course is prerequisite for	-