

FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI  
DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING  
2018/2019 PhD Course Teaching Allocation

**Allocation of Common Courses for all PhD Degree students**

S/N	Semester	Course Code	Course Title	Unit
1	1	EEE 901	Advanced Research and Development Techniques	3
<b>Total Units</b>				<b>3</b>
2	2	EEE 912	System Modelling, Simulation and Analysis	3
<b>Total Units</b>				<b>3</b>

**Course Allocation for PhD, Communication Engineering (COE) Option**

S/No	Semester	Course Code	Course Title	Unit
1	1	EEE 941	Advanced Digital Signal Processing	3
2	1	EEE 943	Cryptography and Computer Security	3
<b>Total Units</b>				<b>6</b>
3	2	EEE 942	Performance Analysis of Communication Networks	3
4	2	EEE 944	Digital Image Processing	3
<b>Total Units</b>				<b>6</b>

### Course Allocation for PhD, Power System Engineering (PSE) Option

S/N o	Sem ester	Course Code	Course Title	Unit	
1	1	EEE 981	High Voltage Measurement Techniques	3	
2	1	EEE 983	Economic Analysis of Electrical Power System and Electricity Markets	3	
<b>Total Units</b>				<b>6</b>	
3	2	EEE 982	Rotating Machine Analysis	3	
4	2	EEE 984	Power System Dynamics and Quality of Supply	3	
<b>Total Units</b>				<b>6</b>	

### Course Allocation for PhD, Electronic Engineering option

1	1	EEE 971	Prototyping Techniques	3	
2	1	EEE 973	Signal Processing Electronics	3	
3	2	EEE 974	Advanced Topics in VLSI	3	
4	2	EEE 976	Medical Electronics and Magnetic Resonance Imaging Technology	3	

### Course Allocation for PhD, Computer Engineering option

1	1	EEE 951	Technopreneurship and Cyberlaw	3	
2	1	EEE 953	Advanced Microprocessor and Microcontroller Systems	3	
3	2	EEE 952	Speech Processing	3	
4	2	EEE 954	Multimedia Technology	3	

### Course Allocation for PhD, Control Engineering option

1	1	EEE 961	Advanced Tests & Measurement Systems	3	
2	1	EEE 963	Instrumentation and Intelligent Sensor	3	
3	2	EEE 962	Embedded System Design &	3	

			Programming		
4	2	EEE 964	Advanced Software & Firmware Development Techniques	3	

FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI  
 DEPARTMENT OF ELECTRICAL AND ELCTRONIC ENGINEERING  
 MASTER (MEng) DEGREE PROGRAMME  
 2018/2019 Master (MEng) Course Teaching Allocation

**Common Courses for all Master Degree students (MSc/MEng)**

S/N	Semester	Course Code	Course Title	Unit
1	1	EEE 811	Engineering Project Management and Quality Assurance	3
<b>Total Units</b>				<b>3</b>
2	2	EEE 812	Advanced Engineering Mathematics	3
<b>Total Units</b>				<b>3</b>
3	3	EEE 830	Seminar I & II	1
4	4	EEE 890	Project/Dissertation	6

**Core Courses for MSc/MEng, Communication Engineering (COE) Option**

S/No	Semester	Course Code	Course Title	Unit
1	1	EEE 841	Digital Signal Processing	3
2	1	EEE 843	Information Theory and Source Coding	3
3	1	EEE 845	Satellite and Microwave Communication	3
4	1	EEE 847	Wireless and Radio Communication	3
<b>Total Units</b>				<b>12</b>
5	2	EEE 840	Advanced Antenna Theory	3
6	2	EEE 842	Digital Communication	3
7	2	EEE 844	Optical Communication	3
8	2	EEE 846	Radar and Navigation Systems	3
<b>Total Units</b>				<b>12</b>

### Core Courses for MSc/MEng, Computer Engineering (Comp. Eng) Option

S/No	Semester	Course Code	Course Title	Unit
1	1	EEE 851	Algorithms, Data Structures, and Programming Languages	3
2	1	EEE 853	Data Communication and Computer Networks	3
3	1	EEE 855	Real-Time Systems and Real-time Operating Systems	3
4	1	EEE 857	Web and Multimedia Technologies	3
<b>Total Units</b>				<b>12</b>
5	2	EEE 850	Advanced Digital Logic and System Design	3
6	2	EEE 852	FPGA Design and Programming	3
7	2	EEE 854	Information Security and Management	3
8	2	EEE 856	Software Engineering	3
<b>Total Units</b>				<b>12</b>

### Core Courses for MSc/MEng, Control Engineering (Control) Option

S/No	Semester	Course Code	Course Title	Unit
1	1	EEE 861	Control Systems Stability and Reliability	3
2	1	EEE 863	Linear Systems	3
3	1	EEE 865	Modern Control Systems	3
4	1	EEE 867	Optimal Control	3
<b>Total Units</b>				<b>12</b>
5	2	EEE 860	Control of communication and energy networks	3
6	2	EEE 862	Linear Multi-Variable Control Systems	3
7	2	EEE 864	Non-Linear & Adaptive Control Systems	3
8	2	EEE 866	Real-time Computer Control	3
<b>Total Units</b>				<b>12</b>

### Core Courses for MSc/MEng, Electronic Engineering (Electronic) Option

S/No	Semester	Course Code	Course Title	Unit
1	1	EEE 871	Advanced Digital Electronic Circuits Design & Testing	3
2	1	EEE 873	Integrated Circuits & VLSI Technology	3
3	1	EEE 875	Lasers and Opto-Electronic Devices	3
4	1	EEE 877	Physics of Semi-Conductor Devices & Microelectronics	3
<b>Total Units</b>				<b>12</b>
5	2	EEE 870	Analog Electronic Circuits Design	3
6	2	EEE 872	Computer Methods for Analysis and Design of VLSI Circuits	3
7	2	EEE 874	FPGA Design and Programming	3
8	2	EEE 876	Microwave Electronic Devices and Systems	3
<b>Total Units</b>				<b>12</b>

### Core Courses for MSc/MEng, Power System Engineering (PSE) Option

S/No	Semester	Course Code	Course Title	Unit
1	1	EEE 881	High Voltage Engineering	3
2	1	EEE 883	Power System Protection	3
3	1	EEE 885	Power Systems Analysis	3
4	1	EEE 887	Smart Grids & Sustainable Electricity Systems	3
<b>Total Units</b>				<b>12</b>
5	2	EEE 880	Electrical Machine Design and Analysis	3
9	2	EEE 882	Power Electronics and Electrical Drives	3
7	2	EEE 884	Power System Planning, Reliability, and Extension	3
8	2	EEE 886	Power Systems Operation and Control	3
<b>Total Units</b>				<b>12</b>

