

# Updated Program Structure

Bachelor of Technology (Hons) in Electronics (BTEL)  
Bachelor of Technology (Hons) in Telecommunications (BTTC)

## BACHELOR OF TECHNOLOGY (HONS) IN ELECTRONICS

No.	Course Code	Course Title	Credit Hours
<b>MPU COURSES</b>			
1.	MPU3113/03	Hubungan Etnik	3
2.	MPU3123/03	Tamadun Islam dan Tamadun Asia	3
3.	MPU3213/03 MPU3223/03	Bahasa Kebangsaan A (for candidates without SPM credit in BM), <b>or</b> Decision Making Skills (for candidates with SPM credit in BM)	3
4.	MPU3313/03 MPU3323/03 MPU3333/03	Comparative Religions, <b>or</b> Parenting and Family Issues, <b>or</b> Human Rights	3
5.	MPU3412/02	Co-Curriculum	2
<b>Subtotal Credit Hours</b>			<b>14</b>
<b>UNIVERSITY COMPULSORY COURSES</b>			
1.	WUC107/03	Workplace Communication Skills (To replace WUC106/05 Communication Skills for the Workplace)	3
2.	<b>WUC111/03</b>	<b>Foundation Mathematics</b>	<b>3</b>
3.	WUC114/05 <b>WUC115/05</b> <b>WUC116/05</b>	University Mathematics A <del>University Mathematics B</del> <b>or</b> <del>University Mathematics for General Studies</del>	5
4.	WUC117/03	Introduction to Computing and Internet	3
5.	WUC131/03	Learning Skills for University Studies	3
6.	WUC203/03	Writing Skills for University Studies (To be replaced WUC202/05 Advanced Writing Skills for University Studies)	3
<b>Subtotal Credit Hours</b>			<b>20</b>
<b>BASIC MAJOR COURSES</b>			
1.	TCC238/05	Structured Programming	5
2.	TEE101/05	Engineering Mathematics I <sup>*a</sup>	5
3.	TEE202/05	Engineering Mathematics II <sup>*b</sup>	5
4.	TEE201/05	Electrical Circuits & Power (To replace TEE204/05 Electronics Principles) <sup>*c</sup>	5
5.	TEE206/05	Digital Electronics (To replace TEE205/05 Digital Design) <sup>*d</sup>	5
6.	TEE208/05	Analog Electronics (To replace TEE207/05 Analog Circuits) <sup>*e</sup>	5
7.	TEE209/05	Field Theory <sup>*f</sup>	5
8.	TEE301/05	Signals and Systems <sup>*g</sup>	5
<b>Subtotal Credit Hours</b>			<b>40</b>

## BACHELOR OF TECHNOLOGY (HONS) IN ELECTRONICS

CORE MAJOR COURSES			
1.	TEL202/05	Power Electronics & Drives <sup>h</sup>	5
2	TEE314/05	Microelectronics <sup>i</sup>	5
3.	TEL204/05	Semiconductor Device Physics (To replace TEL301/05 Solid State Semiconductor Devices) <sup>j</sup>	5
4.	TEL302/05	Control Systems <sup>k</sup>	5
5.	TEL203/05	Process Control and Instrumentation <sup>l</sup>	5
6.	TEL305/05	Microprocessor & Microcontroller (To replace TEL304/05 Microprocessor) <sup>m</sup>	5
7.	TEL309/10	EL Project <sup>n</sup>	10
<b>Subtotal Credit Hours</b>			<b>40</b>
ELECTIVE COURSES (Choose Any Two)			
1.	BBM103/05	Principles & Practice of Management	5
2.	BBM 210/05	Entrepreneurship Development	5
3	TMT305/05	Fundamentals of Multimedia Technology <sup>o</sup>	5
4.	TIC301/05	Digital Communications <sup>p</sup>	5
5.	TEE315/05	VLSI Design <sup>q</sup>	5
<b>Subtotal Credit Hours</b>			<b>10</b>
<b>Programme Total Credit Hours <sup>r</sup></b>			<b>124</b>

### Advisory Prerequisites:

No.	Course Code & Title	Advisory Prerequisite
a.	TEE101/05 Engineering Mathematics I	WUC114/05
b.	TEE202/05 Engineering Mathematics II	WUC114/05
c.	TEE201/05 Electrical Circuits & Power (To replace TEE204/05 Electronics Principles)	WUC114/05
d.	TEE206/05 Digital Electronics (To replace TEE205/05 Digital Design)	WUC114/05
e.	TEE208/05 Analog Electronics (To replace TEE207/05 Analog Circuits)	TEE201/05
f.	TEE209/05 Field Theory	TEE101/05
g.	TEE301/05 Signals and Systems	TEE202/05
h.	TEL202/05 Power Electronics & Drives	TEE201/05, TEE208/05
i.	TEE314/05 Microelectronics	TEL204/05
j.	TEL204/05 Semiconductor Device Physics (To replace TEL301/05 Solid State Semiconductor Devices)	TEE101/05, TEE209/05
k.	TEL302/05 Control Systems	TEL203/05, TEE301/05
<b>l.</b>	<b>TEL203/05 Process Control and Instrumentation</b>	<b>TEE101/05, TEE202/05, TEE201/05 &amp; TEE208/05</b>
m.	TEL305/05 Microprocessor & Microcontroller (To replace TEL304/05 Microprocessor)	TEE206/05
n.	TEL309/10 EL Project	Completed 90 credits
o.	TMT305/05 Fundamentals of Multimedia Technology	TMT201/05
p.	TIC301/05 Digital Communications	TEE213/03
q.	TEE315/05 VLSI Design	TEL204/05 & TEE314/05

## **BACHELOR OF TECHNOLOGY (HONS) IN ELECTRONICS**

### **Important Notes:**

1. The course **WUC111/03 Foundation Mathematics** which was a foundation (optional) course is now offered as University compulsory course. This change is only applicable to new students from July 2010 intake onwards. Students are eligible for exemption as per conditions set out in the Advanced Standing Announcement.
2. The total credit hours for new students from January 2014 intake onwards is 124.

## BACHELOR OF TECHNOLOGY (HONS) IN TELECOMMUNICATIONS

No.	Course Code	Course Title	Credit Hours
<b>MPU COURSES</b>			
1.	MPU3113/03	Hubungan Etnik	3
2.	MPU3123/03	Tamadun Islam dan Tamadun Asia	3
3.	MPU3213/03 MPU3223/03	Bahasa Kebangsaan A (for candidates without SPM credit in BM), <b>or</b> Decision Making Skills (for candidates with SPM credit in BM)	3
4.	MPU3313/03 MPU3323/03 MPU3333/03	Comparative Religions, <b>or</b> Parenting and Family Issues, <b>or</b> Human Rights	3
5.	MPU3412/02	Co-Curriculum	2
<b>Subtotal Credit Hours</b>			<b>14</b>
<b>UNIVERSITY COMPULSORY COURSES</b>			
1.	WUC107/03	Workplace Communication Skills (To replace WUC106/05 Communication Skills for the Workplace)	3
2.	WUC111/03	Foundation Mathematics	3
3.	WUC114/05 WUC115/05 WUC116/05	University Mathematics A University Mathematics B <b>or</b> University Mathematics for General Studies	5
4.	WUC117/03	Introduction to Computing and Internet	3
5.	WUC131/03	Learning Skills for University Studies	3
6.	WUC203/03	Writing Skills for University Studies (To be replace WUC202/05 Advanced Writing Skills for University Studies)	3
<b>Subtotal Credit Hours</b>			<b>20</b>
<b>BASIC MAJOR COURSES</b>			
1.	TEE101/05	Engineering Mathematics I <sup>*a</sup>	5
2.	TEE202/05	Engineering Mathematics II <sup>*b</sup>	5
3.	TEE201/05	Electrical Circuits & Power (To replace TEE204/05 Electronics Principles) <sub>*c</sub>	5
4.	TEE206/05	Digital Electronics (To replace TEE205/05 Digital Design) <sup>*d</sup>	5
5.	TEE208/05	Analog Electronics (To replace TEE207/05 Analog Circuits) <sup>*e</sup>	5
6.	TEE209/05	Field Theory <sup>*f</sup>	5
7.	TEE212/05	Information Theory	5
8.	TEE213/05	Telecommunication Principles	5
<b>Subtotal Credit Hours</b>			<b>40</b>

## BACHELOR OF TECHNOLOGY (HONS) IN TELECOMMUNICATIONS

CORE MAJOR COURSES			
1.	TEL305/05	Microprocessor & Microcontroller (To replace TEL304/05 Microprocessor) <sup>tn</sup>	5
2.	TIC301/05	Digital Communications <sup>g</sup>	5
3.	TIC303/05	Wireless Communication <sup>h</sup>	5
4.	TIC304/05	Satellite and Optical Communication <sup>i</sup>	5
5.	TIC305/05	Antenna & Propagation <sup>j</sup>	5
6.	TEE301/05	Signals and Systems <sup>k</sup>	5
7.	TIC308/10	TL Project <sup>l</sup>	10
<b>Subtotal Credit Hours</b>			<b>40</b>
ELECTIVE COURSES (Choose Any Two)			
1.	TCC222/05	Operating Systems	5
2.	TCC234/05	Computer Networks	5
3.	TEE211/05	Quality and Reliability	5
4.	TEL203/05	Process Control & Instrumentation <sup>m</sup>	5
5.	BBM 210/05	Entrepreneurship Development	5
6.	BBM103/05	Principles & Practice of Management	5
<b>Subtotal Credit Hours</b>			<b>10</b>
<b>Programme Total Credit Hours <sup>n</sup></b>			<b>124</b>

### Advisory Prerequisites:

No.	Course Code & Title	Advisory Prerequisite
a.	TEE101/05 Engineering Mathematics I	WUC114/05
b.	TEE202/05 Engineering Mathematics II	WUC114/05
c.	TEE201/05 Electrical Circuits & Power	WUC114/05
d.	TEE206/05 Digital Electronics	WUC114/05
e.	TEE208/05 Analog Electronics	TEE201/05
f.	TEE209/05 Field Theory	TEE101/05
g.	TIC301/05 Digital Communications	TEE213/05 or TEE301/05
h.	TIC303/05 Wireless Communication	TIC301/05
i.	TIC304/05 Satellite and Optical Communication	TIC301/05
j.	TIC305/05 Antenna & Propagation	TEE209/05
k.	TEE301/05 Signals and Systems	TEE202/05
l.	TIC308/01 TL Project	Completed 90 credits
m.	TEL203/05 Process Control and Instrumentation	TEE201/05, TEE208/05
n.	TEL305/05 Microprocessor & Microcontroller (To replace TEL304/05 Microprocessor)	TEE206/05

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- The course **WUC111/03 Foundation Mathematics** which was a foundation (optional) course is now offered as University compulsory course. This change is only applicable to new students from July 2010 intake onwards. Students are eligible for exemption as per conditions set out in the Advanced Standing Announcement.
- The total credit hours for new students from January 2014 intake onwards is **124**.