

Temple University College of Engineering
First Four Semesters of Electrical Engineering at
Ajman University of Science and Technology, UAE
to
B.S. in Electrical Engineering

Ajman University of Science and Technology (AUST) Recommended Course			Temple University Equivalent	
<i>First Semester</i>			<i>First Semester</i>	
217 101	Engineering Mathematics I	3	MATH L000	Mathematics Elective I <small>See Note 1, 2</small>
217 121	Engineering Physics I	4	PHYS L000	Physics Elective I <small>See Note 1, 3</small>
217 141	Chemistry for Engineers	3	CHEM L000	Chemistry Elective <small>See Note 1, 4</small>
104 110	Computer Applications	3	CIS L000	CIS Elective <small>See Note 1,5</small>
102 140	Communication Skills in Arabic	3	Arabic U000	Arabic Upper Level Elective <small>See Note 6</small>
<i>Second Semester</i>			<i>Second Semester</i>	
213 145	Programming I	3	CIS L001	CIS Elective <small>See Note 7</small>
217 102	Engineering Mathematics II	3	MATH L001	Mathematics Elective II <small>See Note 1, 2</small>
217 122	Engineering Physics II	4	PHYS L001	Physics Elective II <small>See Note 1, 3</small>
217 150	Introduction to Engineering	1	ENGR 1101	Introduction to Engineering & Engineering Technology <small>See Note 1, 5</small>
102 110	Islamic Culture	3	Religion 2606	Introduction to Islam <small>See Note 6</small>
	University Elective I	3		Dependent on Selection <small>See Note 8</small>
<i>Third Semester</i>			<i>Third Semester</i>	
213 235	Logic Design	4	EE 2612/2613	Digital Circuit Design and Lab <small>See Note 1</small>
213 246	Programming II	3	CIS 1057	Programming in C <small>See Note 1, 7</small>
215 211	Circuit Analysis I	4	EE 2312/2313	Electrical Engineering Science I <small>See Note 1</small>
217 203	Engineering Mathematics III	3	MATH L002	Mathematics Elective III <small>See Note 1, 2</small>
103 110	Statistics	3	STAT L000	Statistics Elective <small>See Note 1, 2</small>
<i>Fourth Semester</i>			<i>Fourth Semester</i>	
211 251	Electronic Devices and Circuits I	4	EE 3312/3313	Electronic Devices and Circuits with Lab <small>See Note 1</small>
212 221	Signals and Systems	3	EE 3512	Signals: Continuous and Discrete <small>See Note 1</small>
215 212	Circuit Analysis II	4	EE 2322/2323	Electrical Engineering Science II <small>See Note 1</small>
217 204	Engineering Mathematics IV	3	MATH L003	Mathematics Elective IV <small>See Note 1, 2</small>
	University Elective II	3		Dependent on Selection <small>See Note 8</small>
217 200	Report Writing & Presentation	1	ENGR L000	Engineering Elective <small>See Note 6</small>
	Total credits taken	68		Total credits transferred

Notes:

1. Course satisfies a major requirement at Temple.
2. Temple's College of Engineering will accept AUST Mathematics courses 217.101, 217.102, 217.203, 217.204 and Statistics 103.110 to fulfill the required mathematics sequence Math 1041, 1042, 2043 and 3041 for the B.S. in Electrical Engineering.
3. Temple's College of Engineering will accept AUST Physics 217.121 and 217.122 to fulfill the required Physics sequence 1061 and 1062.
4. Temple's College of Engineering will accept AUST Chemistry 217.141 Chemistry for Engineers to fulfill the required Chemistry 1031/1033.
5. Used in combination with 217.150 to satisfy the ENGR 1101 requirement.
6. Courses required by AUST which transfer to Temple but do not fulfill a specific major or university requirement would be used as general elective credit only to reach the minimum 124 credits required for graduation.
7. Temple's College of Engineering will accept the combination of 213.145 and 213.246 for CIS 1057 and a CIS elective.
8. It is highly recommended that students select from 115.130 General Psychology (IN) or 114.110 Economic Concepts (IN); 112.110 Principles of Art and Architecture (AR); and 115.160 Emirates Society (IS) for University Electives at AUST. Students choosing other electives at AUST may need additional courses at Temple to complete the 45+ Core or 45+ Gen Ed requirements.

Remaining requirements at Temple University		
Summer Session I between 2nd and 3rd year		Credits
ENGL 0802	Analytical Reading and Writing <small>See Note A</small>	4
EE 2011	Engineering Analysis-MATLab	3
Session Total		7
Fifth Semester		
EE 3612/3613	Microproc Systems & Lab	4
EE 3712	EM Fields & Waves	3
ENGR 2331	Statics	3
EE 2196	Technical Communication	3
Semester Total		13
Sixth Semester		
EE 3412/3413	Control Systems and Lab	4
EE 3522	Stoch Proc Sig Sys	3
EE xxxx	EE Elective <small>See Note B</small>	3
EE xxxx	EE Elective <small>See Note B</small>	3
ENGR 4169	Engineering Seminar I	1
Semester Total		14
Seventh Semester		
ENGR 4196	Engineering Senior Design I	1
EE4512/4513	Analog and Digital Comm & Lab	4
EE xxxx	EE Elective <small>See Note B</small>	3
45+ Core/Gen Ed	IH 0851 Mosaic I (GY) or IH 0852 Mosaic II (GZ)	3
45+ Core/Gen Ed	Studies in Race Core (RS) / Gen Ed Race and Diversity(GD)	3
Semester Total		14
Eighth Semester		
ENGR 4296	Engineering Senior Design II	3
EE/ENGR xxxx	EE/ENGR Elective <small>See Note B</small>	3
EE xxxx	EE Elective <small>See Note B</small>	3
45+ Core/Gen Ed	Remaining area(s) not met by the selected AUST Electives <small>See Note C</small>	3
Semester Total		12
Remaining Temple Requirements		60
Notes A. An English placement exam is required for all students not transferring credits for English 0802. Students who do not place into English 0802 will need to complete English 0701 as a pre-requisite. B. A list of approved electives can be found on page 6 of this agreement. Students should consult with their Academic Advisor at Temple for an up-to-date listing of approved electives. C. 45+ Core/Gen Ed students need one course from International Studies (IS) / World Society (GG) and one course each in two of these areas: American Culture (AC) / US Society (GU), Arts (AR) / (GA), or Individual and Society (IN) / Human Behavior (GB).		

General Degree Notes:

- I. The degree minimum requirement is 124 s.h. Assuming no remedial or repeat coursework is required the student completes the remaining coursework listed above at Temple.
- II. The student completing the AUST and Temple courses and requirements specified on pages 4 and 5 of this agreement will meet all requirements for graduation with the Bachelors of Science in Electrical Engineering BSEE degree from Temple:
 - a. 32 s.h. of Math/Sciences
 - b. 64 s.h. of Engineering
 - c. 19 s.h. of General Education for 45+ transfer status
 - d. 124 s.h. minimum of course work
- III. Students indentified by their AUST Dean, or designee as having completed the requirements in the agreement will have 45+ transfer status at Temple University.

- IV. The two Ajman University of Science and Technology Electives must be selected from the list below to optimize the transfer to the General Education/ Core Program at Temple University. If these are not taken at AUST, then additional General Education/ Core courses must be taken at Temple University.

Temple Approved Ajman University of Science and Technology (AUST) Elective Courses (Six Credit Hours)				
Course #	Course Title	Credits	Temple Equivalent	
112 110	Principles of Art and Architecture	3	ART H 1001	The Visual Experience (AR)
115 160	Emirates Society	3	HIST L000	History Elective (IS)
115 130	General Psychology	3	Psych 1061	Psychology as a Social Science (IN)
Or				
114 110	Economic Concepts	3	ECON 1001	Introduction to the Economy (IN)

- V. This proposal assumes that the student would take ENGL 0802 as their first course at Temple, however, this is subject to student's command of English. Some students may have to start with a lower level English course, such as ENGL 0701 before taking ENGL 0802. In such cases the proposed study plan needs to be revised, and the student may need additional time and credit hours for graduation.

- VI. All required Mathematics and Statistics courses for the BS in Electrical Engineering must be completed at Ajman University of Science and Technology prior to attending Temple University. Students who wish to take additional math courses at Temple must take the math placement test and then follow the recommended sequence.

VII.

Available EE and EGR Electives at Temple University					
<i>Fall Semester</i>		<i>Credits</i>	<i>Spring Semester</i>		<i>Credits</i>
EE 4522	Digital Signal Process	3	EE 3722	EM Wave Prop	3
EE 4532	Comp Data Comm	3	EE 3723	EM Wave Prop Lab	1
EE 4712	Power Electronics	3	EE 3732	Electric Machinery	3
EE 4312	Adv Microelectronics	3	EE 3733	Electric Machinery Lab	1
EE 4412	Modern Control	3	EE 4422	Digital Control	3
			EE 3622	Embedded Systems	3
			EE 3623	Embedded Sys Lab	1
			EE 4542	Telecomm Eng	3
			EE 4612	Adv Processor Sys	3
			EE 4542	Telecomm Eng	3
			EE 4612	Adv Processor Sys	3
			EE 4322	VLSI Sys Design	3
			ENGR4116	Spacecraft Engineering	3

- VIII. To find the online application:
- Go to www.temple.edu/undergrad
 - Click on "Applying" on the gray bar across the top
 - Click on "Transfer Students" on the left hand side - This will take you to an online application
- IX. All inquiries about the undergraduate program and application are handled through the Office of Undergraduate Admissions. If you have specific questions about your application or the admission process, please call 215-204-7200. Inquiries about the **Bachelors of Science in Electrical Engineering** program or specific course requirements can be directed to College of Engineering, Dr. Steven Ridenour, 215-204-8825, steven.ridenour@temple.edu.
- X. Temple's course numbers changed effective Summer 2007. A cross walk table of old/new numbers can be accessed at <http://renumbering.temple.edu/> (click on courses).