# **Articulation Agreement**

#### **Between**

# The Herff College of Engineering University of Memphis

#### And

#### Bermuda College

The University of Memphis (UofM), through its Herff College of Engineering (HCOE), a public institution of higher education for the State of Tennessee, United States of America, and Bermuda College (BC), (each a "Party" and collectively, the "Parties"), enter into this Agreement on this 16th day of May 2025 (the "Effective Date") and hereby agree as follows:

#### 1. Program Purpose

This Agreement allows Bermuda College students who have completed an Associate of Science degree ("AS") to transfer credits as stipulated in Appendix A for specified undergraduate courses that may be applied to undergraduate bachelor's degree programs offered through HCOE. Sample study plans in Appendix B show that high achieving students can complete the remaining credits required for the following Bachelor of Science programs of study offered through HCOE within 2-3 academic years, including summer semesters, upon matriculation to UofM:

- a. BS in Biomedical Engineering
- b. BS in Civil Engineering
- c. BS in Electrical Engineering
- d. BS in Engineering Technology
- e. BS in Computer Engineering
- f. BS in Mechanical Engineering

#### 2. Enrollment, Tuition, and Costs

- a. To be eligible for the transfer of credits under this Agreement, an applicant must enter BC on or after the effective date of this Agreement and must earn an Associate of Science (AS-SCIEN) degree from BC with a Grade Point Average of at least 2.5 and a grade of C- or better in all transfer courses.
- b. BC students must complete the application for admission to the UofM and submit all required supporting documents, pay the application fee, by the established deadlines of the year of matriculation.
  - i. English Proficiency Requirement: BC students must demonstrate proficiency in the English language. This requirement can be met by either being a citizen of Bermuda or by having completed at least one semester of English composition with a grade of C or better at the College of Bermuda.

- ii. Transferring College Credits to the UoM: It is the responsibility of each student to request that the official transcript be sent to UofM from the designated BC office. BC students are encouraged to submit their official BC transcript through the vendor Parchment.
- c. Prior to the start of the program, the UofM will provide applicants with an estimate of the expenses normally incurred during the program of study.
- d. Students will pay tuition and fees to the University of Memphis at the international rate. Any scholarships awarded to the student may reduce the rate to that of a domestic out-of-state student.
- e. A limited number of competitive partial scholarships may be available, subject to the availability of funding, to qualifying BC students who enroll in a bachelor's degree program offered through HOCE.
- f. In addition to tuition, BC students are responsible for the following costs: international travel, room and board, living expenses, UofM mandatory fees, mandatory University Health Insurance Program for international students, textbooks, and miscellaneous expenses.

## 3. Housing and Visa

- a. The UofM will assist incoming students in locating suitable housing accommodations and offer, as appropriate, assistance on registration and advice regarding campus life, health, language, and cultural adjustment.
- b. The UofM Office of International Student Services (ISS) will provide BC students with the required documents needed to apply for nonimmigrant visas for their study period in the United States. BC students are responsible for paying any costs for obtaining those visas. The UofM does not guarantee and shall not have any responsibility to ensure the granting of any visas, permits, or other immigration related approvals.

#### 4. Institutional Obligations

- a. The Parties agree to share detailed curricular information, including course syllabi, and communicate any changes to degree completion requirements that may impact time to degree completion and related expenses.
- b. Each Party will appoint a liaison who will be responsible for the successful operation of the program. Duties will include, but are not limited to, publicizing the program, recruiting, and screening for the program, and making necessary academic arrangements for the program. For BC, Dr. Ali Arouzi will serve as Liaison. For the UofM, Dr. Amy de Jongh Curry will serve as Liaison.

#### 5. Communications & Notices

Each Party shall send communications or notices pertaining to this Agreement to the other Party at the relevant address set forth below or to such other address designated by that other Party through written notice.

THE UNIVERSITY

Dr. Amy de Jongh Curry

OF MEMPHIS:

Associate Dean for Academic Affairs and Administration

3795 Central Avenue

201 Engineering Administration The University of Memphis Memphis, TN 38152, USA

(901) 678-2017

adejongh@memphis.edu

BERMUDA

Dr. Ali Arouzi

COLLEGE: Vice President of Academic Affairs

P.O. Box HM 2718, Hamilton HM LX

21 Stonington Avenue, South Road, Paget PG 04, Bermuda

(441) 236-9000 Ext. 4062 aarouzi@college.bm

## 6. Use of Logo and Name

Each Party agrees not to use the other Party's name, trademarks, or other intellectual property in any manner whatsoever without prior written consent in each instance. Requests pertaining to the UofM shall be emailed to the Department of Marketing and Communications at <a href="logo@memphis.edu">logo@memphis.edu</a>. The Parties acknowledge by this Agreement, that they acquire no right, title, or interest in and to the other Party's Trademarks whatsoever other than to use the Trademarks in accordance with the term and conditions hereof. The use of each Party's Trademarks may not be assigned, transferred, shared, or divided in any manner by the other Party without the prior written consent in each instance.

#### 7. Equal Opportunity

No person on the grounds of disability, age, race, color, religion, sex, national origin, veteran status or any other classification protected by United States and/or Tennessee State constitutional and/or statutory law shall be excluded from participation in, or be denied benefits of, or be otherwise subjected to discrimination in the performance of this Agreement.

#### 8. Duration and Amendment of the Agreement

This Agreement shall be in force and be binding upon the Parties hereto for a period of three (3) years from the Effective Date of this Agreement and is renewable by mutual consent of the Parties in a signed, written approval. Either Party may terminate this Agreement with no less than a six (6)-month advance written notice. In the event that this Agreement is terminated, students currently enrolled shall be permitted to complete the program in accordance with the terms of this Agreement.

This Agreement may be amended or renewed by a document with signatures from authorized representatives of each Party.

#### 9. Dispute Resolution

In the event of a dispute arising out of or relating to this Agreement, the Parties shall establish a committee of six (6) senior representatives, three (3) appointed by each Party, to attempt to resolve the dispute in good faith. If the dispute cannot be resolved through negotiation, the Parties retain the right to pursue all available remedies under applicable law.

#### 10. Liability

Each party shall be solely liable for payment of its portion of all claims, liability, costs, expenses, demands, settlements, or judgments resulting from the negligence, actions, or omissions of itself or those for whom it is legally responsible relating to or arising under this Agreement. All claims against the UofM, its officers, agents, trustees, and employees in performing any responsibility specifically required under the terms of this agreement shall be submitted to the Board of Claims or the Claims Commission of the State of Tennessee. Damages recoverable against the University shall be limited to claims paid by the Board of Claims or the Claims Commission pursuant T.C.A. § 9-8-301, et. seq.

#### 11. Conflict of Interest.

BC warrants that no fee has been nor shall be paid directly or indirectly to any officer or employee of the State of Tennessee as wages, compensation, or gifts in exchange for acting as officer, agent, employee, subcontractor, or consultant to BC in connection with this Agreement.

#### 12. Choice of Law.

This Agreement shall be governed in accordance with the laws of the State of Tennessee without regard to its conflict of law principles.

#### 13. Miscellaneous Provisions.

If a translation of this Agreement is prepared and signed by the Parties, this English language version shall be the official version and shall govern if there is a conflict between this English language version and the translation. All disputes under this Agreement shall be resolved and conducted, regardless of the means of authority, in the English language.

The terms of this Agreement shall apply to any subsequent agreements entered into between the Parties for specific protocols, activities, or cooperation.

No party shall be liable for any breach of this Agreement or non-performance of its obligations under this Agreement on account of Force Majeure. Force Majeure means any event of an unforeseeable cause beyond the control and without the negligence of the parties, including, but not limited to, fire, flood, other severe weather, acts of God, war, terrorism, pandemic, epidemic, government restrictions, quarantine, or the like.

The Parties acknowledge that the University of Memphis is a public institution of higher education in the United States. As an entity of the State of Tennessee, under the Constitution and laws of the

State of Tennessee it possesses certain rights and privileges, is subject to certain limitations and restrictions, and only has such authority as is granted to it under the Constitution and laws of the State of Tennessee. Notwithstanding any other provision to the contrary, nothing in this Agreement is intended to be, nor shall it be construed to be, a waiver of the sovereign immunity of the State of Tennessee or a prospective waiver or restriction of any of the rights, remedies, claims, and privileges of the State of Tennessee. Moreover, notwithstanding the generality or specificity of any provision herein, the provisions of this Agreement as they pertain to the University of Memphis are enforceable only to the extent authorized by the Constitution and laws of the State of Tennessee.

This Agreement shall take effect when signed by each side:

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed.

On behalf of:	On behalf of:
Bermuda College	University of Memphis
Dr. Ali Arouzi	Dr. Okenwa Okoli
Dr. Ali Arouzi (19 June. 2025 16:42:41 UTC)	Di. Ohenwa Okoli 123 June. 2025 20.28.25 UTC)
Dr. Ali Arouzi	Dr. Okenwa Okoli
Vice President of Academic Affairs	Dean, Herff College of Engineering
Dr. David Sam	David J. Russomanno
Dr. David Sam President	Dr. David Russomanno Executive Vice President for Academic Affairs & Provost

# APPENDIX A: COURSE EQUIVALENCIES

# University of Memphis/Bermuda College Course Equivalencies Applicable to Bachelor of Science Degree Programs in Herff College of Engineering

Bermuda College (AS degree)	Credits	University of Memphis (BS degree)	Credits
BIO 1121 Principles of Biology I	4	BIOL 1110 General Biology I +	4
BIO 1121 Principles of Biology 1	+	BIOL 1111 General Biology I Lab	<u>'</u>
BIO 1122 Principles of Biology II	4	BIOL 1120 General Biology II +	3
210 11 <b>-2</b> 1 1		BIOL 1121 General Biology II Lab	
CHM 1111 Principles of Chemistry I	4	CHEM 1110 General Chemistry I + CHEM 1111 General Chemistry I Lab	4
		CHEM 1111 General Chemistry II +	
CHM 1112 Principles of Chemistry II	4	CHEM 1121 General Chemistry II Lab	4
ENG 1111 Freshman Composition	3	General Education: Communication	3
ENG 1112 Literary Analysis	3	General Education: Communication	3
ENG 2212 Oral Communication	3	General Education: Communication	3
HIS 2203 The United States Since the Civil War	3	General Education: American History	3
HIS 2204 The United States as a World Power	3	General Education: American History	3
MAT 1105 College Algebra	3	MATH 1710 College Algebra	3
MAT 1141 Pre-Calculus	3	MATH 1730 Pre-Calculus	4
MAT 1152 Calculus I	3	MATH 1910 Calculus I	4
MAT 2201 Calculus II	3	MATH 1920 Calculus II	4
MAT 2210 Linear Algebra	3	MATH 3242 Intro Linear Algebra	3
MAT 2220 Multivariable Calculus	3	MATH 2110 Calculus III	4
MAT 2240 Elementary Differential Equations	3	MATH 2120 Differential Equations	3
TEC 1010 Intro to Engineering and Design	3	TECH 1411 Introduction to Technology	2
TEC 1002 Intro to Programming for Technicians	3	TECH 1211 Computer Programming	3
TEC 1000 Intro to Computer Aided Technical Drawing	3	TECH 1521 Graphics/Descriptive Geometry	3
TEC 1004 Intro to Electricity and			
Electronics	3	TECH 1811 Electronic Circuit Technology	3
Humanities (1100 or higher) elective	3	General Education: Humanities/Fine Arts	3
Social Sciences (1100 or higher) elective	3	General Education: Social/Behavioral Sciences	3

# **APPENDIX B: SAMPLE STUDY PLANS**

## Sample Study Plan: Biomedical Engineering

Associate of Science (AS-SCIEN), Bermuda College BS in Biomedical Engineering, The University of Memphis

**Total Credits: 66-71** 

# Bermuda College, AS-SCIEN

YEAR 1	Credits
Summer Session	2
MAT 1105 College Algebra	3
First Semester – 15 credits	
CSC 1110 Learning Strategies for Student Success	1
ENG 1111 Freshman Composition	3
MAT 1141 Pre-Calculus	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	
BIO 1121 Principles of Biology I	4
CHM 1111 Principles of Chemistry I	4
Second Semester – 18 credits	2
ENG 1112 Literary Analysis	3 3
MAT 1152 Calculus I	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	4
BIO 1122 Principles of Biology II	4
CHM 1112 Principles of Chemistry II Natural Sciences (1100-level) 1 elective	4
Natural Sciences (1100-level) 1 elective	7
YEAR 2	
First Semester – 15-18 credits	
Elective (1100 or higher) 1 elective	
MAT 2201 Calculus II	3
Natural Sciences (2200-level) 2 electives in area of concentration	6 or 8
Natural Sciences (2200-level) 1 elective	3 or 4
Humanities (1100 or higher) elective	_
ENG 2212 Oral Communication	3
Second Semester – 15-17 credits	
Natural Sciences (2200-level) 1 elective in area of concentration	3 or 4
Natural Sciences (2200-level) 1 elective not in your area of concentration	3 or 4
MAT 2220 Multivariable Calculus	3
Elective (2200) 1 elective	3
MAT 2240 Elementary Differential Equations	3
Social Sciences (1100 or higher) elective	3
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# University of Memphis, BS in Biomedical Engineering YEAR 3

### **Total Credit Hours: 75**

#### **Summer Semester – 8 Credit Hours**

PHYS 2110 - Physics for Scientists and Engineers I Credit Hours: (3)

PHYS 2111 - Sci/Engr Phys Lab I Credit Hours: (1)

PHYS 2120 - Physics For Scientists and Engineers II Credit Hours: (3)

PHYS 2121 - Sci/Engr Phys Lab II Credit Hours: (1)

#### Fall Semester - 17 Credit Hours

BIOM 1701 - Introduction to Biomedical Engineering Design Credit Hours: (1)

BIOM 1702 - Biomedical Engineering Visualization Credit Hours: (1)

BIOM 1720 - Intro Biomed Engr Tools Credit Hours: (3)

ENGR 1010 - Engineering Problem Solving or Engineering Elective Credit Hours: (3)

EECE 2201 - Circuit Analysis I Credit Hours: (3)

CIVL 2131 - Statics Credit Hours: (3)

American History Requirement Credit Hours: (3)

#### Spring Semester - 16 Credit Hours

BIOM 3110 - Med Physiology/BIOM Credit Hours: (3)

BIOM 3010 - Medical Measurements Credit Hours: (4)

BIOM 3710 - Physiological System/Modeling Credit Hours: (3)

BIOM 2720 - Experimental Design Analysis Credit Hours: (3)

MECH 2320 - Mechanics of Materials or MECH 2332 - Dynamics Credit Hours: (3)

#### YEAR 4

# Summer Semester - 3 Credit Hours

TECH 4472 - Computer Aided Design Credit Hours: (3)

#### Fall Semester - 16 Credit Hours

BIOM 4760 - Biomed Engr Design Principles Credit Hours: (3)

BIOM 4730 - Biomaterials Credit Hours: (4)

BIOM Elective Credit Hours: (3)

Technical Elective Credit Hours: (3)

Engineering Elective Credit Hours: (3)

#### **Spring Semester – 15 Credit Hours**

BIOM Elective Credit Hours: (3)

Engineering Elective Credit Hours: (3)

Technical Elective Credit Hours: (3)

BIOM 4782 - Biomedical Design Practicum Credit Hours: (1)

BIOM 4784 - Biomedical Design Studio Credit Hours: (2)

# Sample Study Plan: Civil Engineering

Associate of Science (AS-SCIEN), Bermuda College BS in Civil Engineering, The University of Memphis

**Total Credits: 66-71** 

# Bermuda College, AS-SCIEN

YEAR 1	Credits
Summer Session	
MAT 1105 College Algebra	3
First Semester – 15 credits	
CSC 1110 Learning Strategies for Student Success	1
ENG 1111 Freshman Composition	3
MAT 1141 Pre-Calculus	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	
BIO 1121 Principles of Biology I	4
CHM 1111 Principles of Chemistry I	4
Second Semester – 18 credits	
ENG 1112 Literary Analysis	3
MAT 1152 Calculus I	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	J
BIO 1122 Principles of Biology II	4
CHM 1112 Principles of Chemistry II	4
Natural Sciences (1100-level) 1 elective	4
YEAR 2	
First Semester – 15-18 credits	
Elective (1100 or higher) 1 elective MAT 2201 Calculus II	3
	6 or 8
Natural Sciences (2200-level) 2 electives in area of concentration Natural Sciences (2200-level) 1 elective	3 or 4
Humanities (1100 or higher) elective	3014
ENG 2212 Oral Communication	3
ENG 2212 Of all Communication	J
Second Semester – 15-17 credits	
Natural Sciences (2200-level) 1 elective in area of concentration	3 or 4
Natural Sciences (2200-level) 1 elective not in your area of concentration	3 or 4
MAT 2220 Multivariable Calculus	3
Elective (2200) 1 elective	
MAT 2240 Elementary Differential Equations	3
Social Sciences (1100 or higher) elective	3

# University of Memphis, BS in Civil Engineering

**Total Credit Hours: 84** 

#### YEAR 3

#### **Summer Semester – 4 Credit Hours**

PHYS 2110 – Physics for Scientists and Engineers I Credit Hours: (3)

PHYS 2111 - Sci/Engr Phys Lab I Credit Hours: (1)

#### Fall Semester – 15 Credit Hours

CIVL 1101 - Civil Engr Measurements Credit Hours: (3)

CIVL 2131 - Statics Credit Hours: (3)

CIVL 2103 - Approx/Uncertainty in Engr Credit Hours: (3)

ENGR 1010 - Engineering Problem Solving or CIVL Elective Credit Hours: (3)

American History Requirement Credit Hours: (3)

#### Spring Semester - 14 Credit Hours

CIVL 1112 - Civil Engr Analysis Credit Hours: (3)

CIVL 3322 - Mechanics of Materials Credit Hours: (3)

CIVL 3325 - Mechanics of Materials Lab Credit Hours: (1)

CIVL 3121 - Structural Analysis I Credit Hours: (3)

MECH 2332 - Dynamics Credit Hours: (3)

#### YEAR 4

#### Fall Semester - 13 Credit Hours

CIVL 2101 - Civil Engr Visualization Credit Hours: (3)

CIVL 3137 - Civil Engr Materials Credit Hours: (3)

CIVL 3140 - Environmental Systems Engineering Credit Hours: (4)

CIVL 3161 - Transportation Systems Engineering Credit Hours: (3)

#### Spring Semester - 14 Credit Hours

CIVL 3180 - Civil Engr Hydraulics Credit Hours: (3)

CIVL 3131 - Design of Steel Structures or CIVL 4135 - Reinforced Concrete Design Credit Hours: (3)

CIVL 3181 - Hydrology Credit Hours: (3)

CIVL 3182 - Hydraulics and Hydrology Lab Credit Hours: (1)

CIVL 4151 - Soil Mechanics Credit Hours: (3)

CIVL 4153 - Soil Mechanics Laboratory Credit Hours: (1)

#### YEAR 5

# Fall Semester - 12 Credit Hours

CIVL 4195 - Professional Practice/Civil En Credit Hours: (3)

CIVL 4197 - Review/Engineering Fundamental Credit Hours: (0)

CIVL Elective Credit Hours: (3)

CIVL 4171 - Construction Engineering Credit Hours: (3)

CIVL 4111 - Engineering Economics Credit Hours: (3)

#### **Spring Semester – 12 Credit Hours**

CIVL 4199 - Civil Engr Design Credit Hours: (3)

CIVL Elective Credit Hours: (3)

CIVL Elective Credit Hours: (3)

# Sample Study Plan: Computer Engineering

Associate of Science (AS-SCIEN), Bermuda College BS in Computer Engineering, The University of Memphis

**Total Credits: 63-68** 

# Bermuda College, AS-SCIEN

YEAR 1	Credits
Summer Session	•
MAT 1105 College Algebra	3
First Semester – 15 credits	
CSC 1110 Learning Strategies for Student Success	1
ENG 1111 Freshman Composition	3
MAT 1141 Pre-Calculus	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	
BIO 1121 Principles of Biology I	4
CHM 1111 Principles of Chemistry I	4
•	
Second Semester – 18 credits	
ENG 1112 Literary Analysis	3
MAT 1152 Calculus I	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	
BIO 1122 Principles of Biology II	4
CHM 1112 Principles of Chemistry II	4
Natural Sciences (1100-level) 1 elective	4
YEAR 2	
First Semester – 15-18 credits	
Elective (1100 or higher) 1 elective	
MAT 2201 Calculus II	3
Natural Sciences (2200-level) 2 electives in area of concentration	6 or 8
Natural Sciences (2200-level) 1 elective	3 or 4
Humanities (1100 or higher) elective	
ENG 2212 Oral Communication	3
Second Semester – 12-14 credits	
Natural Sciences (2200-level) 1 elective in area of concentration	3 or 4
Natural Sciences (2200-level) 1 elective not in your area of concentration	3 or 4
Elective (2200) 1 elective	2
MAT 2240 Elementary Differential Equations	3
Social Sciences (1100 or higher) elective	3

#### University of Memphis, BS in Computer Engineering YEAR 3

**Total Credit Hours: 89** 

#### Fall Semester – 12 Credit Hours

EECE 1208 - Intro EECE Lab Credit Hours: (1)

ENGR 1010 - Engineering Problem Solving or Computer Engineering Elective Credit Hours: (3)

COMP 1900 - CS1: Introduction to Programming Credit Hours: (4)

PHYS 2110 - Physics for Scientists and Engineers I Credit Hours: (3)

PHYS 2111 - Sci/Engr Phys Lab I Credit Hours: (1)

#### **Spring Semester – 15 Credit Hours**

EECE 2201 - Circuit Analysis I Credit Hours: (3)

EECE 2203 - Electrical and Computer Engineering Lab 1 Credit Hours: (1)

EECE 2207 - Engineering Math Applications Credit Hours: (3)

COMP 2150 - CS2: OOP and Data Structures Credit Hours: (4)

COMP 2700 - Discrete Structures Credit Hours: (4)

#### YEAR 4

#### **Summer Semester – 4 Credit Hours**

PHYS 2120 - Physics For Scientists and Engineers II Credit Hours: (3)

PHYS 2121 - Sci/Engr Phys Lab II Credit Hours: (1)

#### Fall Semester – 15 Credit Hours

EECE 2222 - Digital Circuit Design Credit Hours: (4)

EECE 3211 - Electronics I Credit Hours: (3)

EECE 3201 - Circuit Analysis II Credit Hours: (4)

EECE 3213 - Electrical and Computer Engineering Lab 2 Credit Hours: (1)

EECE 3203 - Signals and Systems Credit Hours: (3)

EECE 3207 - EECE Recitation: Signals and Circuits Credit Hours: (0)

#### Spring Semester - 16 Credit Hours

MATH 3242 - Intro Linear Algebra Credit Hours: (3)

EECE 3270 - Intro to Microprocessor Credit Hours: (4)

EECE 4235 - Probabilistic System Analysis Credit Hours: (3)

EECE 4991 - Project Design and Implementation Credit Hours: (3)

Technical Elective Credit Hours: (3)

#### YEAR 5

#### Fall Semester - 15 Credit Hours

EECE 4278 - Computer Organization and Architecture Credit Hours: (3)

Computer Engineering Elective Credit Hours: (3)

EECE 4081 - Software Engineering Credit Hours: (3)

EECE 4279 - Professional Development Credit Hours: (3)

American History Requirement Credit Hours: (3)

#### **Spring Semester – 12 Credit Hours**

EECE 4280 - Electricl/Computer Engr Design Credit Hours: (3)

Computer Engineering Elective Credit Hours: (6)

# Sample Study Plan: Electrical Engineering

Associate of Science (AS-SCIEN), Bermuda College BS in Electrical Engineering, The University of Memphis

**Total Credits: 66-71** 

# Bermuda College, AS-SCIEN

Summer Session MAT 1105 College Algebra  3  First Semester – 15 credits
First Compaton 15 anodita
CSC 1110 Learning Strategies for Student Success 1 ENG 1111 Freshman Composition 3
ENG 1111 Freshman Composition 3 MAT 1141 Pre-Calculus 3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY
BIO 1121 Principles of Biology I
CHM 1111 Principles of Chemistry I
Second Semester – 18 credits
ENG 1112 Literary Analysis 3
MAT 1152 Calculus I 3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY
BIO 1122 Principles of Biology II
CHM 1112 Principles of Chemistry II 4 Natural Sciences (1100-level) 1 elective 4
Natural Sciences (1100-level) 1 elective 4
YEAR 2
First Semester – 15-18 credits
Elective (1100 or higher) 1 elective
MAT 2201 Calculus II 3
Natural Sciences (2200-level) 2 electives in area of concentration 6 or 8
Natural Sciences (2200-level) 1 elective 3 or 4
Humanities (1100 or higher) elective
ENG 2212 Oral Communication 3
Second Semester – 15-17 credits
Natural Sciences (2200-level) 1 elective in area of concentration 3 or 4
Natural Sciences (2200-level) 1 elective in area of concentration  3 or 4
MAT 2220 Multivariable Calculus
Elective (2200) 1 elective
MAT 2240 Elementary Differential Equations 3
Social Sciences (1100 or higher) elective 3

# University of Memphis, BS in Electrical Engineering YEAR 3

### **Total Credit Hours: 87**

#### Fall Semester - 15 Credit Hours

EECE 1208 - Intro EECE Lab Credit Hours: (1)

PHYS 2110 - Physics for Scientists and Engineers I Credit Hours: (3)

PHYS 2111 - Sci/Engr Phys Lab I Credit Hours: (1)

ENGR 1010 - Engineering Problem Solving or EECE Elective Credit Hours: (3)

COMP 1900 - CS1: Introduction to Programming Credit Hours: (4)

MATH 3242 - Intro Linear Algebra Credit Hours: (3)

# Spring Semester - 15 Credit Hours

EECE 2201 - Circuit Analysis I Credit Hours: (3)

EECE 2203 - Electrical and Computer Engineering Lab 1 Credit Hours: (1)

EECE 2207 - Engineering Math Applications Credit Hours: (3)

EECE 2222 - Digital Circuit Design Credit Hours: (4)

PHYS 2120 - Physics For Scientists and Engineers II Credit Hours: (3)

PHYS 2121 - Sci/Engr Phys Lab II Credit Hours: (1)

#### YEAR 4

#### Fall Semester - 15 Credit Hours

EECE 3211 - Electronics I Credit Hours: (3)

EECE 3201 - Circuit Analysis II Credit Hours: (4)

EECE 3213 - Electrical and Computer Engineering Lab 2 Credit Hours: (1)

EECE 3203 - Signals and Systems Credit Hours: (3)

EECE 3207 - EECE Recitation: Signals and Circuits Credit Hours: (0)

EECE 3270 - Intro to Microprocessor Credit Hours: (4)

#### Spring Semester - 15 Credit Hours

EECE 4235 - Probabilistic System Analysis Credit Hours: (3)

EECE 4251 - Control Systems Engineering Credit Hours: (3)

EECE 3240 - Electromagnetic Field Theory or EECE 4213 - Antenna Theory/Design or EECE 4215 - Applied

Electromagnetic Fields Credit Hours: (3)

Electrical Engineering Depth Elective Credit Hours: (3)

American History Requirement Credit Hours: (3)

#### YEAR 5

# Fall Semester - 13 Credit Hours

EECE 4279 - Professional Development Credit Hours: (3)

EECE 4991 - Project Design and Implementation Credit Hours: (3)

EECE 4201 - Energy Conversion Credit Hours: (4)

American History Requirement Credit Hours: (3)

#### **Spring Semester – 12 Credit Hours**

EECE 4280 - Electricl/Computer Engr Design Credit Hours: (3)

EECE Elective Credit Hours: (3)

EECE Elective Credit Hours: (3)

Technical Elective Credit Hours: (3)

# Sample Study Plan: Engineering Technology

Associate of Science (AS-SCIEN), Bermuda College BS in Engineering Technology, The University of Memphis

**Total Credits: 63-70** 

# Bermuda College, AS-SCIEN

YEAR 1	Credits
Summer Session	
MAT 1105 College Algebra	3
First Semester – 15 credits	
CSC 1110 Learning Strategies for Student Success	1
ENG 1111 Freshman Composition	3
MAT 1141 Pre-Calculus	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	
PHY 1121 Principles of Physics I	4
CHM 1111 Principles of Chemistry I	4
<u></u>	
Second Semester – 18 credits	
ENG 1112 Literary Analysis	3
MAT 1152 Calculus I	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	
PHY 1122 Principles of Physics II	4
CHM 1112 Principles of Chemistry II	4
Natural Sciences (1100-level) 1 elective	4
YEAR 2	
First Semester – 15-19 credits	
Natural Sciences (2200-level) 2 electives in area of concentration	6 or 8
Natural Sciences (2200-level) 1 elective	3 or 4
Elective (1100 or higher) 1 elective	3 or 4
Humanities (1100 or higher) elective	
ENG 2212 Oral Communication	3
Second Semester – 12-14 credits	
Natural Sciences (2200-level) 1 elective in area of concentration	3 or 4
Natural Sciences (2200-level) 1 elective not in your area of concentration	3 or 4
Elective (2200) 1 elective	3 or 4
Social Sciences (1100 or higher) elective	3

# University of Memphis, BS in Engineering Technology YEAR 3

**Total Credit Hours: 80-82** 

#### Fall Semester - 14 Credit Hours

TECH 1411 - Introduction to Technology Credit Hours: (2)

TECH 1521 - Graphics/Descriptive Geometry Credit Hours: (3)

TECH 1711 - Manufacturing Process I Credit Hours: (3)

TECH 1010 - Computer Applications in Tech Credit Hours: (3)

American History Requirement Credit Hours: (3)

#### **Spring Semester - 12 Credit Hours**

TECH 1211 - Computer Programming Credit Hours: (3)

TECH 1811 - Electronic Circuit Technology Credit Hours: (3)

TECH 4381 - Principles of Supervision Credit Hours: (3)

Technical Elective Credit Hours: (3)

#### YEAR 4

#### Fall Semester - 15 Credit Hours

TECH 2908 - Applications of Technology Credit Hours: (2)

TECH 2821 - Solid State Technology Credit Hours: (3)

TECH 2822 - Circuit Analysis Credit Hours: (4)

Technical Elective Credit Hours: (3)

American History Requirement Credit Hours: (3)

#### **Spring Semester – 15 Credit Hours**

TECH 3044 - Analysis for Engineering Tech Credit Hours: (4)

TECH 3440 - Project Plan/Cost Evaluation Credit Hours: (3)

TECH 4462 - Quality Improvement Credit Hours: (3)

TECH 4401 - Science/Technology/Society Credit Hours: (2)

Technical Elective Credit Hours: (3)

#### YEAR 5

#### Fall Semester - 13-14 Credit Hours

TECH 4943 - Senior Project Plan Seminar Credit Hours: (1)

Technical Elective Credit Hours: (3-4)

Technical Elective Credit Hours: (3)

Technical Elective Credit Hours: (3)

Technical Elective Credit Hours: (3)

# Spring Semester - 11-12 Credit Hours

TECH 4945 - Senior Project Credit Hours: (2)

Technical Elective Credit Hours: (3-4)

Technical Elective Credit Hours: (3)

Technical Elective Credit Hours: (3)

# Sample Study Plan: BS in Mechanical Engineering, The University of Memphis

Associate of Science (AS-SCIEN), Bermuda College BS in Mechanical Engineering, The University of Memphis

#### Bermuda College, AS-SCIEN

Students intending to complete this degree plan in two years should expect to take MAT 1105 during the summer prior to their freshman year.

YEAR 1	Credits
Summer Session	2
MAT 1105 College Algebra	3
First Semester – 15 credits	
CSC 1110 Learning Strategies for Student Success	1
ENG 1111 Freshman Composition	3
MAT 1141 Pre-Calculus	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	
BIO 1121 Principles of Biology I	4
CHM 1111 Principles of Chemistry I	4
7. 10 1. 10 11.	
Second Semester – 18 credits	2
ENG 1112 Literary Analysis	3
MAT 1152 Calculus I	3
Natural Sciences (1100-level) 2 electives in BIO, CHM, EES or PHY	4
BIO 1122 Principles of Biology II	4
CHM 1112 Principles of Chemistry II	4
Natural Sciences (1100-level) 1 elective	7
YEAR 2	
First Semester – 15-18 credits	
Elective (1100 or higher) 1 elective	
MAT 2201 Calculus II	3
Natural Sciences (2200-level) 2 electives in area of concentration	6 or 8
Natural Sciences (2200-level) 1 elective	3 or 4
Humanities (1100 or higher) elective	
ENG 2212 Oral Communication	3
Second Semester – 15-17 credits	
Natural Sciences (2200-level) 1 elective in area of concentration	3 or 4
Natural Sciences (2200-level) 1 elective not in your area of concentration	3 or 4
MAT 2220 Multivariable Calculus	3
Elective (2200) 1 elective	-
MAT 2240 Elementary Differential Equations	3
Social Sciences (1100 or higher) elective	3
Double Determine (1100 or william) and the	

# University of Memphis, BS in Mechanical Engineering YEAR 3

**Total Credit Hours: 99** 

**Total Credits: 66-71** 

#### **Summer Semester – 8 Credit Hours**

PHYS 2110 - Physics for Scientists and Engineers I Credit Hours: (3)

PHYS 2111 - Sci/Engr Phys Lab I Credit Hours: (1)

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PHYS 2120 - Physics For Scientists and Engineers II Credit Hours: (3)
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PHYS 2121 - Sci/Engr Phys Lab II Credit Hours: (1)

#### Fall Semester - 15 Credit Hours

ENGR 1010 - Engineering Problem Solving or MECH Elective Credit Hours: (3)

MECH 1310 - Intro/Mechanical Engineering Credit Hours: (3)

MECH 2318 - Computer Aided Design I Credit Hours: (3)

CIVL 2131 - Statics Credit Hours: (3)

EECE 2201 - Circuit Analysis I Credit Hours: (3)

#### Spring Semester – 15 Credit Hours

MECH 1314 - Mech Engr Computing Credit Hours: (3)

MECH 2320 - Mechanics of Materials Credit Hours: (3)

MECH 2311 - Engineering Thermodynamics I Credit Hours: (3)

MECH 2321 - Engineering Materials Credit Hours: (3)

MECH 2332 - Dynamics Credit Hours: (3)

#### YEAR 4

#### Fall Semester – 15 Credit Hours

MECH 3312 - Engineering Thermodynamics II or MECH 3321 - Mechanics of Machines Credit Hours: (3)

MECH 3319 - Engineering Econ/Project Mgmt Credit Hours: (2)

MECH 3323 - Fundamentals of Machine Design Credit Hours: (3)

MECH 3325 - Solid Mechanics and Materials Laboratory Credit Hours: (1)

MECH 3331 - Fluid Mechanics Credit Hours: (3)

MECH 3351 - Heat Transfer I Credit Hours: (3)

#### Spring Semester – 16 Credit Hours

MECH 3324 - System Dynamics, Vibrations, and Controls I Credit Hours: (3)

MECH 3335 - Fluid Mechanics Lab Credit Hours: (1)

MECH 3341 - Numerical/Statistical Methods Credit Hours: (3)

MECH 3355 - Thermo/Heat Transfer Lab Credit Hours: (1)

MECH 3361 - Thermal Fluid System Design or MECH 3363 - Design of Machine Elements Credit Hours: (3)

MECH 3363 - Design of Machine Elements Credit Hours: (3)

#### YEAR 5

#### Fall Semester – 13 Credit Hours

MECH 4300 - Prep/Professional Practice Credit Hours: (1)

MECH 4314 - Senior Design I Credit Hours: (2)

MECH 4335 - System Dynamics, Vibrations, and Controls Lab Credit Hours: (1)

MECH Elective Credit Hours: (3)

MECH Elective Credit Hours: (3)

American History Requirement Credit Hours: (3)

#### **Spring Semester – 14 Credit Hours**

MECH 4323 - Senior Design II Credit Hours: (2)

MECH Elective Credit Hours: (3)

MECH Elective Credit Hours: (3)