



ARTICULATION AGREEMENT

Sending College: HOSTOS COMMUNITY COLLEGE
Program: Associate Degree (A.S.) in Mechanical Engineering
Department: Natural Science Department

Receiving College: VAUGHN COLLEGE OF AERONAUTICS AND TECHNOLOGY
Program: Bachelor Degree (B.S.) in Mechatronics Engineering
Department: Engineering Department

Section One: Objectives of the Agreement

The purpose of this agreement between Hostos Community College and Vaughn College of Aeronautics and Technology is:

- * to promote easy and efficient transfer of Associate Degree graduates from Hostos Community College to Vaughn College;
- * to provide information about junior and senior year requirements to students and advisors at Hostos Community College;
- * to attract qualified students to Hostos Community College and Vaughn College;
- * to facilitate communication between chairpersons, program directors, and Deans at Hostos Community College and their counterparts at Vaughn College.

Section Two: Transfer Agreement

This agreement stipulates:

- 1) Associate's Degree graduates of Hostos Community College, who satisfy the minimum GPA requirements (C or better) will be admitted into the specified programs at Vaughn College, and will be deemed to have satisfied Vaughn College's core and proficiency requirements as specified in the attached templates.
- 2) Courses transferred will receive full credit awarded by Vaughn College as shown in the accompanying tables.

Summary of transfer credits:

- Total transfer credits granted towards baccalaureate degree = 58
- Additional credits required at the senior college to complete baccalaureate degree = 76
- Total credits required for Vaughn baccalaureate degree = 134

- 3) Associate's Degree graduates admitted under this agreement into Vaughn College will normally be able to complete the requirements for a Bachelor's Degree in four semesters of full-time work if the suggested course sequence is followed.

| ARTICULATION AGREEMENT | | | |
|--|--------------|--|-----------|
| HCC: AS in Mechanical Engineering | | Vaughn College:- B.S. in Mechatronics Engineering | |
| Gen Ed Required Core* | | Required Core | |
| ENG 110 Expository Writing | 3 | ENG 110 English 1 | 3 |
| ENG 111 Literature and Composition | 3 | ENG 120 English 2 | 3 |
| MAT 210 Calculus I | 4 | MAT 125 Calculus 1 | 3 |
| CHE 210 General Chemistry I | 4 | CHE 231 Chemistry | 3 |
| Gen Ed: Flexible Core | | Flexible Core | |
| HUM 100 | 3 | HIS 141 Global Civilization | 3 |
| HIS 210 or 211 | 3 | POL 254 American Government | 3 |
| PSY 101 or SOC 101 | 3 | Gen Ed | 3 |
| COM 110 Public Speaking | 3 | ENG 290 Public Speaking | 3 |
| MAT 220 Calculus II | 4 | MAT 225 Calculus 2 | 3 |
| PHY 210 General Physics I | 4 | PHY 125 Engineering Physics | 4 |
| Requirements for the Major | | | |
| MAT 310 Calculus III | 4 | MAT 330 Calculus 3 | 3 |
| MAT 320 Linear Algebra & Vector Analysis | 3 | MAT 410 Linear Algebra | 3 |
| MAT 360 Ordinary Differential Equations | 3 | MAT 325 Engineering Mathematics | 3 |
| ENG 202 Technical Writing | 3 | ENG 240 Tech Writing | 3 |
| PHY 220 General Physics II | 4 | PHY 225 Physics 2 for Engineers | 4 |
| ENGR 204 Electrical Circuits | 3 | ELE 117 DC/AC Circuits | 3 |
| ME 14500 Computer-Aided Drafting | 2 | CDE 117 CAD | 2 |
| ME 24600 Engineering Mechanics I | 3 | MEE 115 ENG Mechanics | 3 |
| ** Note | | Freshman Year Init | 3 |
| CHE 310 & CHE 220 Chem 1 & 2 | 4 + 3 | | 0 |
| TOTAL Credits | 59/66 | | 58 |
| <p>*Students are required to take particular courses in some areas of the Common Core that fulfill both general education and major requirements. If students do not take the required courses in the Common Core, they will have to take additional credits to complete their degree requirements. All students must complete two (2) WI (Writing Intensive) designated classes to fulfill degree requirements. Students may complete the mathematics requirement in the common core.</p> <p>**Elective</p> | | | |

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| Vaughn College Required Courses | |
|--|------------|
| Semester -1 | |
| MCE 101 Intro to Robotics | 1 |
| MEE 210 Thermodynamics | 3 |
| MEE 235 MAT Science and Failure | 3 |
| CDE 385 Intro to CATIA 1 | 2 |
| MEE 220 Mechanics of Materials | 4 |
| PHY 335 PHY 3 | 3 |
| CSC 316 C++ Java Programming | 3 |
| CD 101 Career Development Seminar | 0 |
| Semester total | 19 |
| Semester - 2 | |
| Tech Elective | 3 |
| ELE 220 Electronic circuits | 3 |
| MCE 310 Fund of Mechatronic Engineering | 1 |
| MEE 340 Computational Methods in Engineering | 3 |
| EGR 380 Engineering Project Management | 3 |
| MEE 365 Ele of Machine Design and Vibration Anal | 3 |
| MEE 215 Engineering Mechanics 2 | 3 |
| Semester total | 19 |
| Semester - 3 | |
| MCE 410 Mechatronics 1 | 3 |
| ELE 350 Control System 1 | 3 |
| MAT 356 Probability and Statistics | 3 |
| MEE 440 Heat Transfer | 3 |
| MEE 345 Fluid Mechanics | 3 |
| ELE 230 Digital system | 3 |
| EGR 230 Mech Testing and Eval Lab | 1 |
| MCE 401 Pre Capstone Project | 0 |
| Semester total | 19 |
| Semester - 4 | |
| ELE 326 Microprocessors | 3 |
| MCE 420 Mechatronics 2 | 3 |
| MCE 355 Robot Mechanics and Control | 3 |
| EGR 460 Engineering Economics | 3 |
| MEE 370 Finite Element Analysis | 3 |
| MEE 409 Senior Project | 3 |
| EGR 375 Thermo Fluid Lab | 1 |
| Semester total | 19 |
| Total credits at Vaughn College | 76 |
| Transferred from HOSTOSCC | 58 |
| Total for the degree | 134 |