

ACADEMIC PATHWAYS



Sinclair College – Associate of Science in Engineering and Engineering Technology University Transfer To University of Dayton - Bachelor of Science in Computer Engineering

This Academic Pathway is to be used only by students who are formally admitted to the University of Dayton and enrolled in the UD-Sinclair Academy Program. Being a prospective transfer student from Sinclair College is not the same as a UD-Sinclair Academy student. Students interested in taking advantage of this Academic Pathway must apply to the Program through the UD-Sinclair Academy website at <https://www.udayton.edu/academy/index.php>.

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
CHE	1211	5	General Chemistry I	CHM 1GF+1GFL+1XX*	3+1+1
COM	2206 or 2211**	3	Interpersonal Communication Effective Public Speaking	CMM 320 or CMM 351	3
EGR	2131	4	Engineering Digital Design	ECE 215+215L	4
EGR	2201	4	Circuit Analysis	ECE 201+201L	4
ENG	1101	3	English Composition I	ENG 100	3
HIS	1112	3	Western Civilization II	HST 103	3
MAT	2270	5	Calculus & Analytic Geometry I	MTH 168+1XX	4+1
MAT	2280	5	Calculus & Analytic Geometry II	MTH 169+1XX	4+1
MAT	2310	4	Elementary Differential Equations	MTH 219+2XX	3+1
MEE	2101	3	Statics for Engineers	EGR 201	3
MEE	2201	3	Thermodynamics for Engineers	EGR 202	3
PHI	2205 or 2206	3	Introduction to Philosophy Introduction to Ethics	PHL 103 or PHL 1XC	3
PHY	2201	5	General Physics I	PHY 206+210L+2XX	3+1+1
PHY	2202***	5	General Physics II	PHY 232+2XX	3+2
ECO ECO PLS PSY SOC	2180, 2160, 1120, 1100, or 1101****	6	Select Two Social Science Courses from: Principles of Microeconomics Principles of Macroeconomics American Federal Government General Psychology Introduction to Sociology	ECO 203, ECO 204, POL 201, PSY 101, or SOC 101	6
TOTAL		61			61

ACADEMIC PATHWAYS



Sinclair College – Associate of Science in Engineering and Engineering Technology University
Transfer

To

University of Dayton - Bachelor of Science in Computer Engineering

- *CHE 1211 will substitute for CHM 123+123L requirement for Computer Engineering Program.
- **COM 2206 or 2211 will meet the communication requirement at the University of Dayton with the completion of the Associate Degree. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.
- ***PHY 2202 will substitute for PHY 232 requirement for Computer Engineering Program.
- ****ECO 2160, ECO 2180, PLS 1120, PSY 1100, or SOC 1101 will meet the social science integrated course requirement at the University of Dayton with the completion of 30 credit hours.
- PHL 1XC at UD will substitute for PHL 103 requirement. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.
- 134 hours minimum are required for a BS (Bachelor of Science in Computer Engineering) degree at UD. Required GPA at the time of transfer is 3.0.

Students must complete the following additional coursework at Sinclair in order to graduate in a timely manner from UD:

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	UD COURSE #	UD CREDIT HOUR
CIS	2207	3	Data Structures & Algorithms	CPS 350	3
CIS	2212, 2217, and 2266 ¹	9	Java Software Development I Java Software Development II Python for Data Analytics	CPS 150+151+1XX	4+4+1
EET	2201	5	Electronic Devices & Circuits	ECE 204+204L+2XX	3+1+1
ENG	1201	3	English Composition II	ENG 200	3
MAT	2290	5	Calculus & Analytic Geometry III	MTH 218+2XX	4+1
MAT	2570	4	Discrete Mathematics	CPS 341+2XX	3+1
PHY	2210 ²	3	MATLAB for Scientists & Engineers	ECE 203+2XX	1+2
REL	1111, 1112, 2204, or 2255	3	Eastern Religions Western Religions Great Books: The Bible & Western Culture People and Religion	REL 1XC, REL 103, REL 1XC, or REL 1XC	3
TOTAL		35			35

- ¹Completion of all three courses (CIS 2212, 2217 and 2266) will be granted equivalent courses as CPS 150 and 151.

ACADEMIC PATHWAYS



Sinclair College – Associate of Science in Engineering and Engineering Technology University Transfer

To

University of Dayton - Bachelor of Science in Computer Engineering

- **²PHY 2210** will substitute for ECE 203 requirement for Computer Engineering Program.
- **REL 1XC** at UD will substitute for REL 103 requirement. This exception applies to only UD-Sinclair Academy students. Consult with your UD advisor if you are eligible for this exception.

UDSA Computer Engineering Pathway – 4 Semester Plan for UD				
Semester 5 Fall	CR		Semester 6 Spring	CR
ECE 303	3		CPS 356	3
ECE 303L	1		ECE 300	0
ECE 314	3		ECE 304	3
ECE 314L	1		ECE 304L	1
EGR 103	2		ECE 334	3
Approved CAP Course	3		Approved CAP Course	3
TOTAL	13		TOTAL	13
Semester 7 Fall	CR		Semester 8 Spring	CR
CPS 444	3		ECE 340	3
ECE 431L	2		ECE 432L (Capstone)	3
ECE Adv Digital EL	3		TECH EL	3
TECH EL	3		TECH EL	3
Approved CAP Course	3		Approved CAP Course	3
TOTAL	14		TOTAL	15

- **Review your DegreeWorks audit with your UD academic advisor to fully understand the CAP course requirements, remaining degree requirements, and specific course options.**