

St. Mary's University-Alamo Colleges Transfer Guidelines
Bachelor of Science Applied Physics (AP) – Engineering Option

Students can transfer to St. Mary's a maximum of 66 hours from the Alamo Colleges.

Select a combination of the courses listed below.

St. Mary's University Core (SMC) – 21 hours		
SMC Courses	Hours	Transfer Equivalencies
SMC 1301	3	HIST 1301, 1302, 2311, 2312
SMC 1311	3	PHIL 1301
SMC 1312	3	ASTR 1303, 1304, 1370, 1371, 1403, 1404; GEOL 1301, 1302, 1303, 1304, 1305, 1345
SMC 1313	3	BUSI 1301; CRIJ 1301; ECON 2301, 2302; GOVT 2301, 2302, 2305, 2306; HIST 1301, 1302, 2311, 2312; PSYC 2301; SOCI 1301
SMC 2301	3	PHIL 2306
SMC 2303	3	ARTS 1311, 1312, 1316, 2316; DRAM 1310, 1322, 1351; MUSI 1306
SMC 2304	3	ENGL 2321, 2322, 2327, 2328, 2332, 2333

School of Science, Engineering, and Technology School Specific Core (SSC) – 18 hours		
SSC Courses	Hours	Transfer Equivalencies
Composition	3	ENGL 1301
Foreign Languages	6	SPAN 1411, 1412, 2311, 2312; FREN 1411, 1412, 2311, 2312; ARAB 1411, 1412; GERM 1411, 1412, 2311, 2312; ITAL 1411, 1412, 2311, 2312; JAPN 1411, 1412, 2311, 2312; LATI 1411, 1412, 2311, 2312; CHIN 1411, 1412, 2311, 2312
Speech	3	SPCH 1311, 1315, 1318, 1321, 1342
Social Science	3	BUSI 1301; CRIJ 1301; ECON 2301, 2302; GOVT 2301, 2302, 2305, 2306; HIST 1301, 1302, 2311, 2312; PSYC 1301; SOCI 1301
Fine Arts/ Literature	3	ARTS 1311, 1312, 1316, 2316; DRAM 1310, 1322, 1351; MUSI 1306/ENGL 2321, 2322, 2327, 2328, 2332, 2333

Applied Physics (AP) Major Courses – 19 hours		
Major Courses	Hours	Transfer Equivalencies
CS 1310	3	COSC 1337
MT 2412	4	MATH 2413
MT 2413	4	MATH 2414
PY 1404	4	PHYS 2425
PY 2404	4	PHYS 2426

Applied Physics (AP) Major Courses – 16 hours		
Course	Hours	Transfer Equivalencies
Gen Elective	1	Please refer to the Transfer Articulation for possible elective credits

- * Transfer courses must be completed with a "C" or better. Transfer work will not be posted until an official transcript is received. Courses transfer only as lower division courses (1XXX, 2XXX) not as advanced courses (3XXX or higher).
- * A course will first fulfill the School Specific Core (SSC) requirements before fulfilling the St. Mary's Core (SMC) requirements
- * A course can only fulfill one course requirement.
- * Once a student has matriculated to St. Mary's University, Math, Philosophy, Theology, and SMC 1301, 1311, 1314, 2301 2302, and 4301 may no longer be transferred to St. Mary's University.

St. Mary's Courses		Alamo Colleges	
St. Mary's Core (30 hours)			
Course Number	Title	Course Number	Hrs
SMC 1301	Foundation of Civilization	HIST 1301, 1302, 2311, 2312	3
SMC 1311	Foundation of Reflection: Self	PHIL 1301	3
SMC 1312	Foundation of Reflection: Nature	ASTR 1303, 1304, 1370, 1371, 1403, 1404; GEOL 1301, 1302, 1303, 1304, 1305, 1345	3
SMC 1313	Foundation of Reflection: Other	BUSI 1301; CRIJ 1301; ECON 2301, 2302; GOVT 2301, 2302, 2305, 2306; HIST 1301, 1302, 2311, 2312; PSYC 2301; SOCI 1301	3
SMC 1314	Foundation of Reflection: God	No equivalency. Must take Course at St. Mary's	
SMC 2301	Foundation of Practice: Ethics	PHIL 2306	3
SMC 2302	Foundation of Practice: Civic Engmt	No equivalency. Must take Course at St. Mary's	
SMC 2303	Foundation of Practice: Fine Arts	ARTS 1311, 1312, 1316, 2316; DRAM 1310, 1322, 1351; MUSI 1306	3
SMC 2304	Foundation of Practice: Literature	ENGL 2321, 2322, 2327, 2328, 2332, 2333	3
SMC 4301	Capstone Seminar	No equivalency. Must take Course at St. Mary's	
Total Transferable from Alamo Colleges			21
School of Science, Engineering and Technology Specific Core (21)			
Speech		SPCH 1311, 1315, 1318, 1321, 1342	3
Rhetoric and Composition		ENGL 1301	3
Foreign Language		Six hours of Foreign Language at an introductory level (1411, 1412) or intermediate level (2311, 2312); Or, 12 hours of CLEP credit for a language previously studied.	6
Social Science		BUSI 1301; CRIJ 1301; ECON 2301, 2302; GOVT 2301, 2302, 2305, 2306; HIST 1301, 1302, 2311, 2312; PSYC 2301; SOCI 1301	3
Theology		No equivalency. Must take Course at St. Mary's	
Fine Arts/Literature		ARTS 1311, 1312, 1316, 2316; DRAM 1310, 1322, 1351; MUSI 1306/ENGL 2321, 2322, 2327, 2328, 2332, 2333	3
Total Transferable from Alamo Colleges			18
BS Applied Physics (AP) Engineering Option Major Courses (68 hours)			
CS 1310	Programming I	COCS 1337	3
EG 2141	Logic Design Lab	No equivalency. Must take Course at St. Mary's	
EG 2341	Logic Design	No equivalency. Must take Course at St. Mary's	
EG 2151	Circuit Analysis I Lab	No equivalency. Must take Course at St. Mary's	
EG 2153	Circuit Analysis II Lab	No equivalency. Must take Course at St. Mary's	
EG 2352	Circuit Analysis I	No equivalency. Must take Course at St. Mary's	
EG 2153	Circuit Analysis II	No equivalency. Must take Course at St. Mary's	
EG 3156	Electronics I Lab	No equivalency. Must take Course at St. Mary's	
EG 3157	Electronic II Lab	No equivalency. Must take Course at St. Mary's	
EG 3356	Electronics I	No equivalency. Must take Course at St. Mary's	
EG 3357	Electronics II	No equivalency. Must take Course at St. Mary's	
MT 2412	Calculus I	MATH 2413	4
MT 2413	Calculus II	MATH 2414	4
MT 3311	Differential Equations	No equivalency. Must take Course at St. Mary's	
MT 3414	Calculus III	No equivalency. Must take Course at St. Mary's	
MT 4351	Numerical Analysis	No equivalency. Must take Course at St. Mary's	
MT 4331	Probability and Statistics I	No equivalency. Must take Course at St. Mary's	
PY 1404	University Physics I	PHYS 2425	4
PY 2404	University Physics II	PHYS 2426	4
PY 3101	Atomic Physics Lab	No equivalency. Must take Course at St. Mary's	
PY 3301	Atomic Physics	No equivalency. Must take Course at St. Mary's	
PY 3304	Thermodynamics	No equivalency. Must take Course at St. Mary's	
PY 3307	Classical Mechanics	No equivalency. Must take Course at St. Mary's	
PY 3308	Intro to Quantum Mechanics	No equivalency. Must take Course at St. Mary's	
PY 3309	Electromagnetic Theory	No equivalency. Must take Course at St. Mary's	
Total Transferable from Alamo Colleges			19
General Electives (1 hours)			
General Elective		Please refer to the Transfer Articulation for possible elective credits	
Total Transferable from Alamo Colleges			1

