

Physical vs. Forensic Science

No doubt, there will be a lot of questions about physical or forensic science. I thought I'd take this opportunity to sort of compare the two programs. Let's start with just the math and science courses. When you compare them side to side, you'll notice that Physical Science is, by design, more flexible and encompasses more disciplines of science. You will find there are courses in physical science that are not formally part of forensic science. For example, there is no biology component to forensic science, but a minimum of two semesters is required in physical science. You should keep in mind, however, that forensic science does require 24 elective hours (about 4-8 courses, roughly twice as many as required for physical science but with no limitations on what the courses can be) built in to the program. These electives need not be science courses, but it does mean that any of these courses can be taken with forensic science. The math requirements are very similar, save probability and statistics which is not required for physical science.

Science/Math Course	Forensic Science	Physical Science
BIOL151 General Biology I		0
BIOL311 Principles of Ecology		Elec
BIOL331 Microbiology		Elec.
BIOL371 Genetics		Elec.
BIOL343 Cell and Molecular Biol.		Elec.
CHEM 112/CHEM114 General Chemistry I and II	0	0
CHEM326 Organic Chemistry I	0	0
CHEM328 Organic Chemistry II		Chem. Elec.
CHEM332/SCTC332 Analytical	0	Chem. Track
CHEM452/SCTC452 Inorganic	0	Chem. Track
CHEM460/SCTC460 Biochemistry	0	Chem. Elec.
ESCI208 Earth and Space Science		0
MATH125 Calculus II	0	0
MATH321 Differential Equations	0	0
MATH381/SCTC381 Probability and Statistics	0	
PHSI330 Quantum Mechanics		0
PHSI343 Thermodynamics	0	0
PHSI345 Kinetics and Equilibrium		Elec.
PHSI411 Statistical Mechanics		0
PHSI421 Computational Methods		0
PHYS211/213 University Physics I and II	0	0
PHYS351 Intermediate Quantum Mechanics		Phys. Elec.
PHYS361 Optics		Phys. Elec.
PHYS421 Electromagnetism	0	0
PHYS424 Optics		Phys. Elec.

PHYS439 Solid State Physics		Phys. Track Chem. Elec.
PHYS451/SCTC451 Mechanics	Ö	Phys. Track
SCTC203/403 Computer Applications		Ö
SCTC390 Forensic Seminar	Ö	
Additional Capstone/Internship	Ö	Ö

Note that in this table, “Elec.” means the course in question can be taken as an elective in either the chemistry or physics track, “phys. elec.” and “chem. elec.” means the course can be taken as an elective in the physics or chemistry track respectively, and “chem. track” and “phys. track” means it is a required course in the chemistry or physics track respectively.

The “support courses” are very different between the two programs. Forensic science support courses are all computer graphics courses, while physical science requires that you choose one of two types of support courses, depending on your interests. The choices in physical science include computer science (which is recommended for anybody interested in pure science) or business management (which is recommended for anybody wanting to move right into industry).

Course	Forensic Science	Phys. Sci. Comp. Sci.	Phys. Sci. Bus. Mgmt.
ACCT210 Accounting I			Ö
ACCT211 Accounting II			Ö
ARTD282 2-D Design I	Ö		
ARTD336 Digital Photography	Ö		
ARTD382 3-D Design I	Ö		
ARTD385 3-D Design II	Ö		
BADM220 Business Statistics			Ö
BADM210 Business Finance			Ö
BADM321 Business Statistics II			Ö
BADM334 Small Bus. Mgmt.			Elec.
BADM350 Legal Env. of Business			Elec.
BADM360 Organization and Mgmt.			Ö
BADM370 Marketing			Elec.
BADM425 Production and Op. Mgmt.			Ö
BADM426 Inventory Control			Elec.
BADM427 Logistics			Elec.
BADM428 Material Handling			Elec.
BADM435 Mgmt. Tech. and Innovation			Elec.
BADM436 Entrepreneurship			Elec.
BADM460 Human Resources Mgmt.			Elec.
CIS277 OS Interfaces and Utilities		Elec.	
CIS332 Structured Systems		Ö	
CIS377 On-Line Applications		Elec.	

CIS383 Networking I		Elec.	
CIS384 Decision Support Systems		Elec.	
CIS388 Comp. Forensics	Ö		
CIS427 Inf. Systems Planning and Mgmt.		Elec.	
CIS447 Artificial Intelligence		Elec.	
CIS457 Document Image Processing		Elec.	
CIS484 Database Mgmt. Sys.		Elec.	
CIS488 Advanced Database		Elec.	
CSC250 Comp. Sci. II		Ö	
CSC260 Object Oriented Design		Ö	
CSC300 Data Structures		Ö	
CSC314 Assembly Language		Elec.	
CSC/MATH316 Discrete Mathematics		Ö	
CSC317 Comp. Architecture		Elec.	
CSC335 Assembler II		Elec.	
CSC403 Programming for GUI		Elec.	
CSC410 Parallel Computing		Elec.	
CSC433 Computer Graphics		Elec.	
CSC455 Computer Vision		Elec.	
CSC456 Operating Systems		Elec.	
CSC461 Programming Languages		Ö	
ECON202 Macroeconomics			Ö
ENGL379 Technical Communication	Ö		
OED344 Bus. Communication			Elec.

Looking at this document, you might think that Physical Science has a lot more requirements than Forensic Science. In fact, both majors have the same total number of required courses; 128 hours. In addition, Physical Science has a secondary education track that is not represented on this sheet.

When looking at this document, I recommend you look at the courses, find the ones that interest you the most, and look at the corresponding column to see what program(s) those courses are in. The program that has the most courses of personal interest to you is probably your best choice.