CONCENTRATION IN PHYSICS (AST2)(PLAN CODE: PHST2AS, SUBPLAN CODE: PHYSICS)

Academic Plans, known as programs, include an overview description and a summary of program requirements. You can search the online catalog via the Academic Plan links on the right for a desired program or a specific course information.

Code	Title	Credits/ Units
General Education Requirements		
Communication Skills		
ENGL& 101	English Composition I	5
Quantitative Skills		
MATH& 151	Calculus I [1]	5
MATH& 152	Calculus II	5
Health & Physical Education		
Health Requirement (https://catalog.clark.edu/degree-certificate-requirements/transfer-degree-distribution-list/#health-physical-education)		2
Physical Education Activity (https://catalog.clark.edu/degree-certificate-requirements/transfer-degree-distribution-list/#health-physical-education)		1
Humanities & Social Sciences		
Select one from the following:		5
CMST& 210	Interpersonal Communication	
or CMST& 22	Public Speaking	
or CMST& 23	Small Group Communication	
Select 10 credits/units from the following:		10
Humanities Course Options (https://catalog.clark.edu/degree-certificate-requirements/transfer-degree-distribution-list/#humanities)		
Social Science Course Options (https://catalog.clark.edu/degree-certificate-requirements/transfer-degree-distribution-list/#social-sciences)		
Pre-Major Program Requirements		
ENGL& 102	English Composition II	5
MATH 111	College Algebra	5
or MATH 110	College Algebra With Support	
MATH& 153	Calculus III	5
MATH 221	Differential Equations	5
MATH& 254	Calculus IV	5
Science Sequence Requirements		
CHEM& 141 & CHEM& 151	General Chemistry I and General Chemistry Laboratory I	5
CHEM& 142 & CHEM& 152	General Chemistry II and General Chemistry Laboratory II	5
CHEM& 143 & CHEM& 153	General Chemistry III and General Chemistry Laboratory III	6
PHYS& 241 & PHYS& 231	Engineering Physics I and Engineering Phys Lab I	5
PHYS& 242 & PHYS& 232	Engineering Physics II and Engineering Phys Lab II	5
PHYS& 243 & PHYS& 233	Engineering Physics III and Engineering Phys Lab III	5
Electives [2]		**1-5**
Total Credits/Units		**90**

1. Calculus I (MATH& 151) requires the successful completion of both Trigonometry (MATH 103) and College Algebra (MATH 110/MATH 111), or recommending score on an approved placement test prior to registration.
2. Complete minimum number of credits/units necessary to reach 90 credits.

Program Outcomes

Program outcomes are overarching skills that are emphasized and reinforced throughout several courses in a specific program; they are measurable statements that define what students should know or be able to do by the end of a certificate or degree at Clark College. After successful completion of this program, students will be able to:

- Apply scientific methodologies to develop and answer questions about the natural world.
- Demonstrate understanding of the derivative as an instantaneous rate of change and the definite integral as a limit of a sum.
- Analyze and solve multi-step problems using techniques through single-variable calculus.
- Acquire scientific information from appropriate sources to analyze issues, claims or situations.
- Apply a method of scientific inquiry, valid to the natural sciences, to evaluate claims about the natural world. (GE)
- Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English. (GE)
- Demonstrate progress toward healthier behaviors. (GE)
- Interpret the human experience, within appropriate global and historical contexts, through evaluation, analysis, creation, or performance. (GE)
- Obtain, evaluate, and ethically use information. (GE)
- Analyze patterns of power, privilege, and inequity in the United States. (GE)
- Evaluate, analyze, and explain events, behaviors, and institutions using perspectives and methods in the Social Sciences. (GE)
- Apply communication theory to demonstrate effective oral communication skills. (GE)
- Demonstrate and clearly explain an effective strategy to solve a quantitative problem. (GE)

Program maps are a suggested academic plan and should not be used in the place of regular academic advising appointments. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan. To view the current suggested map for your program please visit our website https://programmap.clark.edu/academics (https://programmap.clark.edu/academics/)