REQUIREMENTS FOR A MAJOR IN THE DEPARTMENT OF PHYSICS

• To complete a major offered by the Physics Department, students must successfully attain the thirty-six (36) advanced level (level 2 and level 3) credits.

• Other department and/or Faculty and/or out-of-Faculty courses (including Foundation courses) must be done to satisfy the ninety-three (93) credits necessary for award of your degree.

• A double major within the department is possible only if the Electronics major is a part of the double major.

o *For example, a double major with a major in Electronics and a major in General Physics*.

• A combined major and a minor within the department is possible only if Electronics satisfies the major and only if Renewable Energy Management or Electronics satisfies the minor.

o *For example, a major in Medical Physics with a minor in Electronics or Renewable Energy Management*.

• Double majors may be done with any Physics Department major and a major from another Department.

o *For example, a major in Material Science with a major in Chemistry*.

• Students pursing the major in Electronics may opt to "specialise" in one of two streams, either Telecommunications or Robotics & Instrumentation. A recommended set of courses for those streams detailed below. Please note that these are suggestions and are not meant to restrict your choice of courses or course combinations.

• Note that as ELET2420 is a core course for some non-Electronics majors, it cannot be counted towards the Electronics majors as a free elective.

• Mathematics courses listed are required to complete Physics majors. For more information on Mathematics courses, please contact the Department of Mathematics. Students pursuing both MATH1142 and MATH1151 otherwise do not need to do MATH1185.

• Preliminary Chemistry courses or their equivalent are needed for the Materials Science Major.

MAJOR	YEAR 1		YEAR 2		YEAR 3		ELECTIVES
	SEMESTER 1	SEMESTER 2	SEMESTER 1	SEMESTER 2	SEMESTER 1	SEMESTER 2	
ELECTRONICS	MATH1141	ELET1500	ELET2405	ECSE2209	ELET3405	ELET3490	Any **Two (2)** Level 2 or 3 ELET courses.
	MATH1185	ELET1405	ELET2450	ELET2410	ELNG3030		
	PHYS1411	PHYS1421	ELET2460	ELET2415			
	PHYS1412	PHYS1422	ELET2530	ELET2570			
	ECSE1109	COMP1161					
ENERGY & ENVIRONMENTAL PHYSICS	MATH1141	ELET1405	ELET2420	PHYS2600	ELET3600	ELET3611	
	MATH1185	PHYS1421	PHYS2300	PHYS3661	PHYS2386	PHYS2396	
	PHYS1411	PHYS1422	PHYS2351	PHYS3671	PHYS3681		
	PHYS1412	PHYS2671					
GENERAL PHYSICS	MATH1141	ELET1405	ELET2420	PHYS2396	****	PHYS3200	Any **Two (2)** Level 2 or 3 PHYS or ELET courses. *** - Course chosen after academic advising session with department representatives **Note:** Highly Recommended: PHYS3399; PHYS2561
	MATH1185	PHYS1421	PHYS2300	PHYS3386	PHYS3351		
	PHYS1411	PHYS1422	PHYS2351	PHYS3395			
	PHYS1412	PHYS2386					
MEDICAL PHYSICS	MATH1141	ELET1405	ELET2460	PHYS2200	PHYS3300	PHYS3389	Any **Two (2)** Level 2 or 3 PHYS or ELET courses. **Note:** Highly Recommended: PHYS3399, PHYS2561, ELET2420
	MATH1185	PHYS1421	PHYS2300	PHYS2296	PHYS3341		
	PHYS1411	PHYS1422	PHYS2351	PHYS2396			
	PHYS1412	ELET1500	PHYS2386				
MATERIALS SCIENCE	MATH1141	PHYS1421	PHYS2300	PHYS2561	PHYS3561	PHYS3562	**One (1)** Level 2 or 3 PHYS or ELET courses. **Note:** Highly Recommended: ELET2420 PHYS3399
	MATH1185	PHYS1422	PHYS2351	PHYS2500	PHYS3500	PHYS3565	
	PHYS1411	PHYS2386	PHYS2396				
	PHYS1412	PHYS2671					

REQUIREMENTS FOR A MINOR IN THE DEPARTMENT OF PHYSICS

- A minor in Physics/Electronics requires 18 credits of advanced level (Level 2 and Level 3) courses.
- Students are required to ensure that they have the required pre-requisite for Level 2 and Level 3 courses.

MINOR	LEVELS 2 AND 3	
Electronics	ELET2405 ELET2410 ELET2415	ELET2450 ELET2460 ELET2530
Energy & Environmental Physics	PHYS2351 PHYS2386 PHYS2396	PHYS2600 PHYS3661 PHYS3671
General Physics	PHYS2300 PHYS2351 PHYS2386	PHYS2396 PHYS3351 PHYS3386
Medical Physics	PHYS2200 PHYS2300 PHYS2351	PHYS2386 PHYS2296 PHYS3389
Materials Science	PHYS2351 PHYS2386 PHYS2500	PHYS2561 PHYS3561 PHYS3562