

### DE LA SALLE UNIVERSITY College of Science Physics Department



# BS Physics with Specialization in Materials Science Program of Study

### First Year

#### TERM 1 Course Title Units Foundation Course in Physics 3 Foundation Course in Chemistry 3 Foundation Course in Mathematics 5 **Basic Statistics** 3 Lasallian Studies1 (1) Lasare1 0 National Service Training Program-General Orientation 0 14(1) Total TERM 2 Course Title Units Mathematics in the Modern World 3 P.E. 1 2 Physics Fundamentals – Waves & Optics 3 Physics Fundamentals Lab 1 1 Physics Problems 1 1 Analysis 1 4 Computer for Physics 1 3 17 Total TERM 3 Course Title Units Filipino 1 3 P.E. 2 2 Physics Fundamentals – Elasticity, 3 Fluids, Heat & Thermodynamics Physics Fundamentals Lab 2 1 Analysis 2 3 Advanced Statistics 3 3 Organic Chemistry CWTS Formation Phase / Military Science 1: ROTC (3) Common Module Total 18(3)

#### **Second Year**

TERM 4		
Course Title	Units	
	3	
Filipino 2 P.E. 3		
	2 4	
Mathematical Methods of Physics 1	-	
Mathematical Methods of Physics 2	3	
Electronics 1	3	
Electronics Laboratory 1	1	
Physics Problems 2	1	
Organic Chemistry Lab	1	
Lasallian Studies2	1	
Lasare2	0	
CWTS Community Service Phase/ ROTC Military Science 2: Service Oriented Module	(3)	
Total	18(4)	
TERM 5		
Course Title	Units	
Purposive Communications	3	
P.E. 4	2	
Mathematical Methods of Physics 3	3	
Mathematical Methods of Physics 4	3	
Modern Physics	3	
Physics Fundamentals Lab 3	1	
Introduction to Materials Science 1	3	
- Nanotechnology & Energy	3	
Total	18	
TERM 6		
Course Title	Units	
A Faith Worth Living	3	
Understanding the Self	3	
Classical Mechanics 1	3	
Quantum Mechanics 1	3	
Physics Problems 3	1	
Introduction to Materials Science 2 -	3	
Biomaterials & Sensors	J	
Materials Science Laboratory 1 -	2	
Fabrication & Testing		
Research Apprenticeship 1	0.5	
Total	18.5	



## DE LA SALLE UNIVERSITY College of Science Physics Department



### Third Year

TERM 7		
Course Title	Units	
Art Appreciation	3	
Ethics	3	
Classical Mechanics 2	3	
Quantum Mechanics 2	3	
Electronics 2	3	
Electronics Laboratory 2	1	
Materials Science Laboratory 2 -	1	
Materials Characterization	1	
Research Apprenticeship 2	0.5	
Lasallian Studies3	(1)	
Lasare3	0	
Total	17.5(1)	
TERM 8		
Course Title	Units	
Life and Works of Rizal	3	
Science, Technology and Society	3	
Electricity and Magnetism 1	3	
Statistical Mechanics	3	
Materials Structure and Characterization	3	
Physics Problems 4	1	
Physics Seminar	1	
Research Apprenticeship 3	0.5	
Total	17.5	
TERM 9		
Course Title	Units	
The Philippines and the ASEAN	3	
Panitikan	3	
Solid State Physics	3	
Computer for Physics 2	3	
Physics Research 1	1	
Failure Analysis	3	
Introduction to Photonics	3	
Introduction to Photonics Laboratory	1	
Total	20	

## Fourth Year

Course Title Following Jesus in the Gospels 3 Electricity and Magnetism 2 Computational Methods 3 Physics Research 2 Semiconductor Physics & Devices 3 Analytical Chemistry 3 Analytical Chemistry 1 Total 17  Total 17  Total 17  Total 17  Term 11 Course Title Practicum for Physics Majors/ Global Enrichment Physics Research 3 Total 4  Total 4  Term 12 Course Title Units Readings in the Philippine History 3 The Contemporary World 3 Total 6	TERM 10	
Electricity and Magnetism 2 Computational Methods Physics Research 2 Semiconductor Physics & Devices Analytical Chemistry Analytical Chemistry  Term 11 Course Title Practicum for Physics Majors/ Global Enrichment Physics Research 3 Total  Total  Total  Term 12 Course Title Units Readings in the Philippine History The Contemporary World  3  Semiconductor Physics & Devices 3  Analytical Chemistry 1  Total 17  Total 4  Total  Total 4	Course Title	Units
Electricity and Magnetism 2 Computational Methods Physics Research 2 Semiconductor Physics & Devices Analytical Chemistry Analytical Chemistry  Term 11 Course Title Practicum for Physics Majors/ Global Enrichment Physics Research 3 Total  Total  Total  Term 12 Course Title Units Readings in the Philippine History The Contemporary World  3  Semiconductor Physics & Devices 3  Analytical Chemistry 1  Total 17  Total 4  Total  Total 4	Following Jesus in the Gospels	3
Computational Methods Physics Research 2 Semiconductor Physics & Devices Analytical Chemistry Analytical Chemistry  I Total Total Total Practicum for Physics Majors/ Global Enrichment Physics Research 3 Total Total Total  Term 11  Course Title Units Practicum for Physics Majors/ Global Enrichment Total A Total Total Total 4  Term 12  Course Title Units Readings in the Philippine History The Contemporary World 3	Electricity and Magnetism 2	
Semiconductor Physics & Devices Analytical Chemistry Analytical Chemistry  Total  Total  Total  Total  Total  Total  Course Title Practicum for Physics Majors/ Global Enrichment Physics Research 3  Total	Computational Methods	3
Analytical Chemistry  Analytical Chemistry  1  Total  Total  17  Term 11  Course Title  Practicum for Physics Majors/ Global Enrichment  Physics Research 3  1  Total  Total  4  Term 12  Course Title  Units  Readings in the Philippine History  The Contemporary World  3  Total  3  Total  4  Term 12  Course Title  Units  Readings in the Philippine History  3  The Contemporary World  3	Physics Research 2	1
Analytical Chemistry  Analytical Chemistry  1  Total  Total  17  Term 11  Course Title  Practicum for Physics Majors/ Global Enrichment  Physics Research 3  1  Total  Total  4  Term 12  Course Title  Units  Readings in the Philippine History  The Contemporary World  3  Total  3  Total  4  Term 12  Course Title  Units  Readings in the Philippine History  3  The Contemporary World  3	Semiconductor Physics & Devices	3
TERM 11  Course Title Units  Practicum for Physics Majors/ Global Enrichment Physics Research 3  Total 4  Term 12  Course Title Units  Term 12  Course Title Units  Readings in the Philippine History  The Contemporary World  3	Analytical Chemistry	3
TERM 11  Course Title Units  Practicum for Physics Majors/ Global Enrichment Physics Research 3 1  Total 4  Term 12  Course Title Units  Readings in the Philippine History 3  The Contemporary World 3	Analytical Chemistry	1
TERM 11  Course Title Units  Practicum for Physics Majors/ Global Enrichment Physics Research 3 1  Total 4  Term 12  Course Title Units  Readings in the Philippine History 3  The Contemporary World 3	Total	17
Course Title Units Practicum for Physics Majors/ Global Enrichment  Physics Research 3  Total  Total  TERM 12  Course Title Units Readings in the Philippine History  The Contemporary World  Sample State S		
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Global Enrichment Physics Research 3  Total  Total  4  Term 12  Course Title Readings in the Philippine History The Contemporary World 3		Units
Physics Research 3  Total  Total  4  Total  4  Term 12  Course Title  Readings in the Philippine History  The Contemporary World  3		3
TERM 12  Course Title Units  Readings in the Philippine History 3  The Contemporary World 3		1
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Readings in the Philippine History 3 The Contemporary World 3		
The Contemporary World 3		Units
1 3	Readings in the Philippine History	3
Total 6	The Contemporary World	3
		6

Total Academic Units: **185.5** Total Non-academic Units: **(9)**