



# **OSUN STATE UNIVERSITY, OSOGBO, NIGERIA**

**DEPARTMENT OF SOFTWARE ENGINEERING**

**FACULTY OF COMPUTING AND  
INFORMATION TECHNOLOGY**

**COLLEGE OF SCIENCE, ENGINEERING  
AND TECHNOLOGY**

**CURRICULUM**

**FOR**

**B.Sc. SOFTWARE ENGINEERING**

**JUNE, 2021**

# B.SC. (HONS) SOFTWARE ENGINEERING CURRICULUM

## 100 Level Harmattan Semester

Course Code	Course Title	Units	Status
BIO 101	Basic Biology I	3	C
BIO 107	Experimental Biology I	1	C
CHM 101	General Chemistry I	3	C
CHM 107	Experimental Chemistry I	1	C
MTH 101	General Mathematics I	3	C
PHY 101	General Physics I	3	C
PHY 107	Experimental Physics I	1	C
SEN 101	Introduction to Computing and Applications	2	C
GNS 101	Use of English I	2	R
GNS 103	Use of Library	1	R
GNS 212/ CSC 111	Introduction to Information & Communication Technology	2	R
GNS 211	Basic French	2	R
	<b>Total</b>	<b>24</b>	

## 100 Level Rain Semester

Course Code	Course Title	Units	Status
CHM 102	General Chemistry II	3	C
CHM 108	Experimental Chemistry II	1	C
MTH 102	General Mathematics II	3	C
MTH 104	General Mathematics III	3	C
PHY 102	General Physics II	3	C
PHY 108	Experimental Physics II	1	C
SEN 102	Principles of Programming I	3	C
GNS 102	Use of English II	2	R
GNS 104	Nigerian People and Culture	2	R
GNS 204	Logic and Philosophy	2	R
	<b>Total</b>	<b>23</b>	

## 200 Level Harmattan Semester

Course Code	Course Title	Units	Status
SEN 201	Introduction to Software Engineering	3	C
SEN 203	Computer Architecture and Organization	3	C
SEN 205	Principles of Programming II	3	C
SEN 207	Discrete Structure	3	C
SEN 211	Introduction to Web Technologies	2	C
CSC 209	Data Management I	2	C
STA 221	Statistics for Physical Science and Engineering	3	C
MTH 203	Linear Algebra	2	C
GNS 203	Introduction to Entrepreneurial Skills	2	R
	<b>Total</b>	<b>23</b>	

### 200 Level Rain Semester

Course Code	Course Title	Units	Status
CSC 202	Low Level Language	3	C
CSC 204	Compiler Construction I	3	C
CSC 212	Foundation of Sequential Program (System Programming)	2	C
SEN 202	Software Requirements and Design	3	C
SEN 204	Logic and Its Application in Computer Science	2	C
SEN 206	Principles of Operating System and Workshop Practice	2	C
SEN 208	Data Structures and Algorithms	3	C
SEN 210	Software Construction	2	C
SEN 212	Software Engineering Process	2	C
	<b>Total</b>	<b>22</b>	

### 300 Level Harmattan Semester

Course Code	Course Title	Units	Status
SEN 301	Object Oriented Analysis and Design	3	C
SEN 303	Design and Analysis of Computer Algorithms	2	C
SEN 305	Software Testing and Quality Assurance	2	C
SEN 307	Web Application Development	3	C
SEN 309	Database Systems	3	C
SEN 311	Survey and Concepts of Programming Languages	2	C
SEN 313	Operations Research	3	C
SEN 315	Entrepreneurial Studies in Software Engineering	3	C
	<b>Total</b>	<b>21</b>	

### 300 Level Rain Semester

Course Code	Course Title	Units	Status
SEN 399	Industrial Attachment	6	C
	<b>Total</b>	<b>6</b>	

### 400 Level Harmattan Semester

Course Code	Course Title	Units	Status
SEN 401	Software Configuration Management and Maintenance	2	C
SEN 403	Artificial Intelligence and Expert Systems	3	C
SEN 405	Open Source Software development and Application	2	C
SEN 407	Digital Computer Networks and Communication	2	C
SEN 409	Distributed, Parallel and Cloud Computing	2	C
SEN 411	Special Topics in Software Engineering	2	C
SEN 413	Software Engineering Security	2	C
SEN 497	Research Methodology/Seminar	1	R
<b>Electives:</b> One of the following Courses			
SEN 415	Engineering Mobile Application	2	E
SEN 417	Embedded System	2	E
<b>Total</b>		<b>18</b>	

### 400 Level Rain Semester

Course Code	Course Title	Units	Status
SEN 402	Software Engineering Economics	2	C
SEN 404	Human Computer Interaction	2	C
SEN 406	Software Engineering Profession Practice	2	C
SEN 408	Software Architecture and Design	2	C
SEN 410	Software Engineering Project Management	2	C
SEN 420	Modelling and Simulation	2	C
SEN 499	Research Project	6	C
<b>Electives:</b> One of the following courses			
SEN 414	Fault tolerant computing	2	E
SEN 416	Game Design and Development	2	E
<b>Total</b>		<b>20</b>	

B.Sc. Software Engineering - CCMAS

**100 LEVEL HARMATTAN SEMESTER**

<b>Course Code</b>	<b>Course Title</b>	<b>Unit</b>	<b>Status</b>	<b>LH</b>	<b>PH</b>
GST 111	Communication in English	2	C	15	45
CHM 101	General Chemistry I	2	C	30	0
CHM 107	General Chemistry Practical I	1	C	0	45
MTH 101	Elementary Mathematics I	2	C	30	0
PHY 101	General Physics I	2	C	30	0
PHY 107	General Physics Practical I	1	C	0	45
STA 111	Descriptive Statistics	3	C	45	0
COS 101	Introduction to Computing Sciences	3	C	30	45
LIS 111	Introduction to Library and Information Science	2	C	30	0
	<b>Total</b>	<b>18</b>			

**100 LEVEL RAIN SEMESTER**

<b>Course Code</b>	<b>Course Title</b>	<b>Unit</b>	<b>Status</b>	<b>LH</b>	<b>PH</b>
GST 112	Nigerian Peoples and Culture	2	C	30	0
CHM 102	General Chemistry II	2	C	30	0
CHM 108	General Chemistry Practical II	1	C	0	45
MTH 102	Elementary Mathematics II	2	C	30	0
PHY 102	General Physics II	2	C	30	0
PHY 108	General Physics Practical II	1	C	0	45
COS 102	Problem Solving	2	C	30	45
UNIOSUN – COS 106	Computer Hardware and Workshop Practice	2	C	15	45
UNIOSUN – SEN 104	Introduction to Computing and Application	2	C	15	45
	<b>Total</b>	<b>16</b>			