

FACULTY OF ENGINEERING
Scheme of Instruction & Examination

For
Four Year Degree Programme of
Bachelor of Engineering (B.E)
in
Computer Science Engineering
(Accredited by NBA)
(With effect from the academic year 2021-22)



Estd. 2008

**STANLEY COLLEGE OF ENGINEERING
AND TECHNOLOGY FOR WOMEN
(AUTONOMOUS)**

(Affiliated to Osmania University)

(Accredited by NAAC with "A" Grade)

ABIDS, HYDERABAD-500001, Telangana.

Abbreviation	Meaning
HS	Humanities, Social Sciences and Management
BS	Basic Sciences including Mathematics, Physics and Chemistry
ES	Engineering Sciences including Workshop, Drawing, Basic Electrical / Electronics
PC	Professional Core Subjects
PE	Professional Elective Subjects
OE	Open Elective Subjects
PW	Project Work, Seminars, Internship
MC	Mandatory Courses
AC	Audit Courses
PY	Philosophy
EC	Electronics and Communication Engineering.
CE	Civil Engineering,
MP	Mechanical / Production Engineering
IT	Information Technology
CS	Computer Science Engineering
EE	Electrical and Electronics Engineering
CM	Computer Engineering
AD	Artificial Intelligence and Data Science
L	Lecture
T	Tutorial
P	Practical
G	Grade
D	Drawing
CIE	Continuous Internal Evaluation
SEE	Semester End Evaluation
	Each contact hour is a clock hour
	The duration of the Practical class is two hours; however, it can be extended wherever necessary, to enable the student to complete the experiment.

Induction Program

SMC901CS Induction Program (Mandatory)	3 weeks' duration
Induction program for students to be offered right at the start of the first year	<ul style="list-style-type: none"> Physical Activity Creative Arts Universal Human Values Literary Proficiency Modules Lectures by Eminent People Visits to local Areas Familiarization to Dept./Branch & Innovations

CSE: SEMESTER - I

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hours/Week	CIE	SEE	SEE Duration in Hours	
Theory Courses										
1	SHS901EG	English	2	-	-	2	40	60	3	2
2	SBS101MT	Mathematics-I	3	1	-	4	40	60	3	4
3	SBS902PH	Physics	3	-	-	3	40	60	3	3
4	SES101CS	Programming for Problem Solving	3	-	-	3	40	60	3	3
5	SMC902HS	Mandatory Course	2	-	-	2	40	60	3	-
6	SMC903PO	Mandatory Course	2	-	-	2	40	60	3	-
Practical/ Laboratory Courses										
7	SHS911EG	English Lab	-	-	2	2	40	60	3	1
8	SBS912PH	Physics Lab	-	-	4	4	40	60	3	2
9	SES111CS	Programming for Problem Solving Lab	-	-	4	4	40	60	3	2
10	SES914ME	Workshop	-	-	6	6	40	60	3	3
Total			15	01	16	32	400	600	30	20

CSE: SEMESTER - II

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits	
			L	T	P	Contact Hrs/Wk	CIE	SEE	SEE Duration in Hours		
Theory Courses											
1	SBS201MT	Mathematics-II	3	1	-	4	40	60	3	4	
2	SBS903CH	Chemistry	3	-	-	3	40	60	3	3	
3	SES901EC	Basic Electrical & Electronic Circuits	3	-	-	3	40	60	3	3	
4	SES202CS	Data Structures using C	3	-	-	3	40	60	3	3	
5	SMC904EG	Mandatory Course	2	-	-	2	40	60	3	-	
6	SAC901CS	Audit Course	2	-	-	2	50	-	-	-	
Practical/ Laboratory Courses											
7	SBS 913CH	Chemistry Lab	-	-	4	4	40	60	3	2	
8	SES915ME	Engineering Graphics & Design	1	-	4	5	40	60	3	3	
9	SES212CS	Data Structures using C Lab	-	-	2	2	40	60	3	1	
10	SES911EC	Basic Electrical & Electronic Circuits Lab	-	-	4	4	40	60	3	2	
11	SPW211CS	Field Work	The students have to undergo a Field work of 2-week duration after II-Semester SEE				50	-	-	-	1
Total			17	01	14	32	460	540	27	22	

CSE: SEMESTER - III

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	SEE Duration in Hrs	
Theory Courses										
1	SBS301MT	Mathematics-III (Probability & Statistics)	3	-	-	3	40	60	3	3
2	SES301CS	Discrete Mathematics	3	-	-	3	40	60	3	3
3	SES302EC	Digital Electronics	3	-	-	3	40	60	3	3
4	SPC301CS	OOPs using Java	3	-	-	3	40	60	3	3
5	SPC302CS	Computer Organization	3	-	-	3	40	60	3	3
Practical/ Laboratory Courses										
6	SES312CS	Python Programming Lab	2	-	2	4	40	60	3	3
7	SPC311CS	OOPs using Java Lab	-	-	3	3	40	60	3	1.5
8	SPC312CS	Computer Organization Lab	-	-	3	3	40	60	3	1.5
Total			17	0	8	25	320	480	24	21

CSE: SEMESTER - IV

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	SEE Duration	
Theory Courses										
1	SHS902EG	Effective Technical Communication Skills	3	-	-	3	40	60	3	3
2	SPC401CS	Automata Theory Languages and Computation	3	-	-	3	40	60	3	3
3	SPC402CS	Artificial Intelligence	3	-	-	3	40	60	3	3
4	SPC 403CS	Database Management Systems	3	-	-	3	40	60	3	3
5	SPC404CS	Operating Systems	3	-	-	3	40	60	3	3
6	SAC902EE	Audit Course	2	-	-	2	50	-	-	-
Practical/ Laboratory Courses										
7	SPC413CS	Database Management Systems Lab	-	-	3	3	40	60	3	1.5
8	SPC 414CS	Operating Systems Lab	-	-	3	3	40	60	3	1.5
9	SPC415CS	Web Technology & Applications Lab	2	-	3	5	40	60	3	3.5
10	SPW421CS	Internship-1	The students have to undergo an Internship of 2-week duration after IV-Semester SEE				50	-	-	1
Total			19	0	09	28	420	480	24	22.5

CSE: SEMESTER - V

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	D/ P	Contact Hrs/Wk	CIE	SEE	SEE Duration in Hrs	
Theory Courses										
1	SPC501CS	Design and Analysis of Algorithms	3	-	-	3	40	60	3	3
2	SPC502CS	Data Communication & Computer Networks	3	-	-	3	40	60	3	3
3	SPC503CS	Compiler Design	3	-	-	3	40	60	3	3
4	SPE 501CS	Professional Elective-I	3	-	-	3	40	60	3	3
5	SOE 501XX	Open Elective-I	3	-	-	3	40	60	3	3
Practical/Laboratory Courses										
6	SPC511CS	Design and Analysis of Algorithms Lab	-	-	3	3	40	60	3	1.5
7	SPC512CS	Data Communication & Computer Networks Lab	-	-	3	3	40	60	3	1.5
8	SPC513CS	Compiler Design Lab	-	-	3	3	40	60	3	1.5
Total			15	-	09	24	320	480	24	19.5

CSE: SEMESTER - VI

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	D/P	Contact Hrs/Wk	CIE	SEE	SEE Duration in Hrs	
Theory Courses										
1	SHS601DM	Managerial Economics & Financial Accounting	3	-	-	3	40	60	3	3
2	SPC601CS	Data Mining	3	-	-	3	40	60	3	3
3	SPC 602CS	Software Engineering	3	-	-	3	40	60	3	3
4	SPC 603CS	Distributed Systems	3	-	-	3	40	60	3	3
5	SPE 601CS	Professional Elective -II	3	-	-	3	40	60	3	3
Practical/Laboratory Courses										
6	SPC 611CS	Data mining Lab	-	-	3	3	40	60	3	1.5
7	SPC 612CS	Software Engineering Lab with Mini Project	-	-	5	5	40	60	3	2.5
8	SPC 613CS	Distributed Systems Lab	-	-	3	3	40	60	3	1.5
9	S TS 611CS	Technical Seminar-1	-	-	3	3	50	-	-	1
10	SPW611CS	Internship -2	The students have to undergo an Internship of 4-week duration after VI- Semester SEE				50	-	-	1
Total			15	-	14	29	420	480	24	22.5

CSE: SEMESTER - VII

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	SEE Duration in Hrs	
Theory Courses										
1	SPC 701CS	Machine Learning	3	-	-	3	40	60	3	3
2	SPE701CS	Professional Elective- III	3	-	-	3	40	60	3	3
3	SPE702CS	Professional Elective - IV	3	-	-	3	40	60	3	3
4	SPE703 CS	Professional Elective - V	3	-	-	3	40	60	3	3
5	SOE701XX	Open Elective-II	3	-	-	3	40	60	3	3
Practical/ Laboratory Courses										
6	SPC 711CS	Machine Learning Lab	-	-	3	3	40	60	3	1.5
7	SPE 711CS	Professional Elective- III Lab	-	-	2	2	40	60	3	1
8	SPW 711CS	Project Work - I	-	-	6	6	40	-	3	3
9	S TS 612CS	Technical Seminar-2	-	-	2	2	50	-	-	1
Total			15	-	13	28	370	420	24	21.5

CSE: SEMESTER - VIII

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	SEE Duratin Hrs	
Theory Courses										
1	SOE801XX	Open Elective - III	3	-	-	3	40	60	3	3
Practical/ Laboratory Courses										
2	SPW811CS	Project Work - II	-	-	16	16	40	120	3	8
Total			3	-	16	19	80	180	6	11

Professional Electives

V Sem		VI Sem	VII Sem	
PE-I	PE-II	PE-III	PE-IV	PE-V
Principles of Programming Languages	OOPs using C++	Advanced Python Programming	Predictive Analytics using R	Human Computer Interaction
Data Science using R	Mobile Computing	Cloud Computing	Scalable Architecture for Large Applications	Architecting Applications for Clouding
Distributed Databases	Storage Area Networks	Data Engineering	Information Retrieval Systems	Principles of Data Intensive Systems
Natural Language Processing	Digital Image Processing	Exploratory data analysis	Expert Systems	Deep Learning
Number Theory and Cryptography	Software Security Engineering	Wireless Sensor Networks	Cyber Security	Block Chain Technology

Open Electives

Open Elective-1		Open Elective -2		Open Elective -3	
Course Code	Course Title	Course Code	Course Title	Course Code	Course Title
SOE701EC	Signals Analysis & Transformation Techniques	S OE702EC	Internet of Things	SOE801EC	Embedded Systems
SOE701EE	Electrical Energy Conservation and Safety	S OE702EE	Non-Conventional Energy Sources	SOE801EE	Programmable Logic Controllers
SOE701EG	Soft Skills & Interpersonal Skills	SOE702DM	Management Science	SOE801DM	Human Resource Management
SOE701DM	Entrepreneurship	SOE702CE	Disaster Mitigation	SOE801CE	Road Safety Engineering

Mandatory Courses	
Course Code	Course Title
	Induction Programme
MC-1	Environmental Science
MC-2	Essence of Indian Traditional Knowledge
MC-3	Indian Constitution

Audit Courses	
Course Code	Course Title
AC-1	Design Thinking
AC-2	Electrical Technology