

E.G.S. PILLAY ENGINEERING COLLEGE
(Autonomous)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

Accredited by NAAC with 'A' Grade |

Accredited by NBA (CSE, EEE, MECH, IT, ECE, CIVIL)

NAGAPATTINAM – 611 002



B.TECH. INFORMATION TECHNOLOGY

R-2019

Total Credits: 160 (Lateral Entry: 124)

First Year - First Semester

Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
Theory Course									
1901MA102	Engineering Mathematics – I (Calculus and Linear Algebra)	3	2	0	4	40	60	100	BSC
1901CH101	Applied Chemistry in Informatics	3	0	0	3	40	60	100	BSC
1901GEX03	Programming for Problem Solving	3	0	0	3	40	60	100	ESC
1901ENX01	English for Engineers	2	0	0	2	40	60	100	HSSC
Laboratory Course									
1901GEX52	Computer Programming Laboratory	0	0	2	1	50	50	100	ESC
1901GE151	Engineering Intelligence I	0	0	2	1	100	0	100	EEC
1901CHX51	Engineering Chemistry Laboratory	0	0	2	1	50	50	100	BSC
1901HSX51	Communication Skill Laboratory	0	0	2	1	50	50	100	HSSC
Total		11	2	8	16	410	390	800	

ATTESTED

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PRINCIPAL**

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Second Semester

Course Code	Course Name	L	T	P	C	Maximum Marks			Categor.
						CA	ES	Total	
Theory Course									
1901MA202	Engineering Mathematics – II (Probability and Statistics)	3	2	0	4	40	60	100	BSC
1901PH201	Physics for Information Science	3	0	0	3	40	60	100	BSC
1901GEX01	Basic Electrical and Electronics Engineering	3	0	0	3	40	60	100	ESC
1901GEX02	Engineering Graphics	2	0	2	3	50	50	100	ESC
1901GE201	Engineering Exploration	2	0	0	2	100	0	100	ESC
Laboratory Course									
1901GE254	Computer Hardware and IT Essentials Laboratory	0	0	2	1	50	50	100	ESC
1901GE252	Engineering Intelligence II	0	0	2	1	100	0	100	EEC
1901GEX51	CAD Laboratory	0	0	2	1	50	50	100	ESC
1901GEX53	Basic Electrical and Electronics Engineering Laboratory	0	0	2	1	50	50	100	ESC
1901PHX51	Engineering Physics Laboratory	0	0	2	1	50	50	100	BSC
Total		13	2	12	20	570	430	1000	

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SECOND YEAR

SEMESTER III										
Course Code	Course Name	L	T	P	C	Maximum Marks			Category	
						CA	ES	Total		
Theory Course										
1901MA302	Engineering Mathematics - III (Queuing and Network Model)	3	2	0	4	40	60	100	BSC	
1902IT301	Data Structures and Algorithms	3	0	0	3	40	60	100	PCC	
1902IT302	Computer Organization and Architecture	3	0	0	3	40	60	100	PCC	
1902IT303	Digital Principles and Design	3	0	0	3	40	60	100	PCC	
1902IT304	Problem solving using Python	3	0	0	3	40	60	100	PCC	
	Biology for Engineers	3	0	0	3	40	60	100	BSC	
Laboratory Course										
1902IT351	Data Structures and Algorithms Laboratory	0	0	2	1	50	50	100	PCC	
1902IT352	Digital Principles and Design Laboratory	0	0	2	1	50	50	100	PCC	
1902IT353	Python Programming Laboratory	0	0	2	1	50	50	100	PCC	
1904GE351	Life Skills: Verbal Ability	0	0	2	1	100	-	100	EEC	
Audit Course										
1901MCX02	Constitution of India	2	0	0	0	100	-	100	MC	
Total		20	2	8	23	590	510	1100	-	

SEMESTER IV										
Course Code	Course Name	L	T	P	C	Maximum Marks			Category	
						CA	ES	Total		
Theory Course										
1902IT401	Database Management Systems	3	0	0	3	40	60	100	PCC	
1902IT402	Java Programming	3	0	0	3	40	60	100	PCC	
1902IT403	Operating Systems	3	0	0	3	40	60	100	PCC	
1902IT404	Software Engineering and Project Management	3	0	0	3	40	60	100	PCC	
1902IT405	Computer Networks	3	2	0	4	40	60	100	PCC	
1902IT406	Principles of Communication	3	0	0	3	40	60	100	PCC	
Laboratory Course										
1902IT451	Database Management Systems Laboratory	0	0	2	1	50	50	100	PCC	
1902IT452	Java Programming Laboratory	0	0	2	1	50	50	100	PCC	
1902IT453	Operating Systems Laboratory	0	0	2	1	50	50	100	PCC	
1904GE451	Life Skills: Verbal Reasoning	0	0	2	1	100	-	100	EEC	
Audit Course										
1901MCX01	Environmental Science	2	0	0	0	100	-	100	MC	
Total		20	2	8	23	590	510	1100	-	

THIRD YEAR

SEMESTER V										
Course Code	Course Name	L	T	P	C	Maximum Marks			Category	
						CA	ES	Total		

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Theory Course										
1902IT501	Object Oriented Analysis and Design	3	0	0	3	40	60	100	PC	
1902IT502	Web Programming	3	0	0	3	40	60	100	PC	
1902IT503	Security in Computing	3	0	0	3	40	60	100	PC	
1902IT504	Internet of Things	3	2	0	4	50	50	100	PC	
	Professional Core Elective I	3	0	0	3	40	60	100	PEC	
	Humanities Science Elective I	3	0	0	3	40	60	100	HSSEC	
Laboratory Course										
1902IT551	Web Programming Laboratory	0	0	2	1	50	50	100	PC	
1904IT551	Case Tools (Mini Project I)	0	0	2	1	50	50	100	EEC	
1904GE551	Life Skills: Aptitude I	0	0	2	1	100	-	100	EEC	
1904IT552	Startup Opportunities for IT Engineers	0	0	2	1	100	-	100	EEC	
Audit Course										
1901MCX03	Essence of Indian Traditional Knowledge	2	0	0	0	100	-	100	MC	
Total		20	2	8	23	650	450	1100	-	

SEMESTER VI										
Course Code	Course Name	L	T	P	C	Maximum Marks			Category	
						CA	ES	Total		
Theory Course										
1902IT601	Artificial Intelligence	3	0	0	3	40	60	100	PCC	
1902IT602	Mobile Computing	3	0	0	3	40	60	100	PCC	
1902IT603	Data Warehousing and Data Mining	3	0	0	3	40	60	100	PCC	
	Professional Core Elective II	3	0	0	3	40	60	100	PEC	
	Humanities Science Elective II	3	0	0	3	40	60	100	HSSEC	
	Open Elective I	3	0	0	3	40	60	100	OEC	
Laboratory Course										
1902IT651	Data Mining Laboratory	0	0	2	1	50	50	100	PCC	
1904IT651	Mobile Application Development (Mini Project II)	0	0	2	1	50	50	100	EEC	
1904GE651	Life Skills: Aptitude II & GD	0	0	2	1	100	-	100	EEC	
1904IT652	Industrial Visit Presentation	0	0	0	1	100	-	100	EEC	
Total		18	0	6	22	540	460	1000		

FINAL YEAR

SEMESTER VII										
Course Code	Course Name	L	T	P	C	Maximum Marks			Category	
						CA	ES	Total		
Theory Course										
	Universal Human Values and Ethics	3	0	0	3	40	60	100	HSSC	
1902IT701	Cloud Computing	3	2	0	4	50	50	100	PCC	
	Professional Core Elective III	3	0	0	3	40	60	100	PEC	
	Humanities Science Elective III	3	0	0	3	40	60	100	HSSEC	
	Open Elective II	3	0	0	3	40	60	100	OEC	
Laboratory Course										
1902IT715	Data Mining Lab	0	0	2	1	50	50	100	PCC	
1904IT751	Software Development (Mini Project III)	0	0	2	1	50	50	100	EEC	
1904GE751	Life Skills: Comprehensive Viva	2	0	0	2	100	-	100	EEC	
1904IT752	Inplant Training / Internship Presentation	0	0	0	1	100	-	100	EEC	
Total		17	2	4	21	5140	390	900	-	

SEMESTER VIII

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Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
Theory Course									
	Professional Core Elective IV	3	0	0	3	40	60	100	PEC
	Professional Core Elective V	3	0	0	3	40	60	100	PEC
Laboratory Course									
1904IT851	Project Work	0	0	14	7	50	50	100	EEC
Total		6	0	14	13	130	170	300	-

LIST OF ELECTIVES

Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CA	ES	Total	
PROFESSIONAL ELECTIVE COURSE I									
1903IT001	Software Testing Methods and Tools	3	0	0	3	40	60	100	PEC
1903IT002	Virtual Reality	3	0	0	3	40	60	100	PEC
1903IT003	Information Theory and Coding	3	0	0	3	40	60	100	PEC
1903IT004	Mainframe Computing	3	0	0	3	40	60	100	PEC
PROFESSIONAL ELECTIVE COURSE II									
1903IT005	Multi core Architecture	3	0	0	3	40	60	100	PEC
1903IT006	Cyber Security	3	0	0	3	40	60	100	PEC
1903IT007	Compiler Design	3	0	0	3	40	60	100	PEC
1903IT008	Wireless Communication	3	0	0	3	40	60	100	PEC
PROFESSIONAL ELECTIVE COURSE III									
1903IT009	Robot Process and Automation	3	0	0	3	40	60	100	PEC
1903IT010	Computer Vision	3	0	0	3	40	60	100	PEC
1903IT011	Information Management	3	0	0	3	40	60	100	PEC
1903IT012	Software Architectures	3	0	0	3	40	60	100	PEC
PROFESSIONAL ELECTIVE COURSE IV									
1903IT013	Enterprise Resource Planning	3	0	0	3	40	60	100	PEC
1903IT014	Business Intelligence	3	0	0	3	40	60	100	PEC
1903IT015	Data Analytics	3	0	0	3	40	60	100	PEC
1903IT016	Social Network Analysis	3	0	0	3	40	60	100	PEC
PROFESSIONAL ELECTIVE COURSE V									
1903IT017	Human Computer Interaction	3	0	0	3	40	60	100	PEC
1903IT018	Blockchain Technologies	3	0	0	3	40	60	100	PEC
1903IT019	Game Programming	3	0	0	3	40	60	100	PEC
1903IT020	Deep Learning	3	0	0	3	40	60	100	PEC
HUMANITIES AND SOCIAL SCIENCE ELECTIVE I									
1901MGX04	Principles of Management	3	0	0	3	40	60	100	HSSEC
1901MGX05	Engineering Economics and Finance	3	0	0	3	40	60	100	HSSEC
1901MGX06	Human Resource Development in IT	3	0	0	3	40	60	100	HSSEC
1901MGX01	Total Quality Management	3	0	0	3	40	60	100	HSSEC
HUMANITIES AND SOCIAL SCIENCE ELECTIVE II									
1901HS001	Innovation & Entrepreneurship fundamentals	3	0	0	3	40	60	100	HSSEC
1901HS002	Intellectual Property Rights for Engineers	3	0	0	3	40	60	100	HSSEC
1901HS003	Startup Entrepreneurship	3	0	0	3	40	60	100	HSSEC
1901HS004	Business Model Innovation	3	0	0	3	40	60	100	HSSEC
HUMANITIES AND SOCIAL SCIENCE ELECTIVE III									

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1901HS005	Social Entrepreneurship	3	0	0	3	40	60	100	HSSEC
1901HS006	Design Thinking for Innovation	3	0	0	3	40	60	100	HSSEC
1901HS007	Indian Patent Law & Patent Drafting	3	0	0	3	40	60	100	HSSEC
1901HS008	IP Management & Commercialization	3	0	0	3	40	60	100	HSSEC
ONE CREDIT COURSES									
1905IT001	Full Stack Developer	-	-	-	1	40	60	100	EEC
1905IT002	Devops	-	-	-	1	40	60	100	EEC
1905IT003	Angular JS	-	-	-	1	40	60	100	EEC
1905IT004	Sales force Trail Head	-	-	-	1	40	60	100	EEC
1905IT005	VMware Data Centre and Virtualization	-	-	-	1	40	60	100	EEC
1905IT006	R-Programming	-	-	-	1	40	60	100	EEC
1905IT007	EMC Cloud Infrastructure and Services	-	-	-	1	40	60	100	EEC
1905IT008	Amazon Web Services Cloud Computing Architect	-	-	-	1	40	60	100	EEC
1905IT009	Agriculture for Engineers	-	-	-	1	40	60	100	EEC
1905IT010	Mongo and Maria Db	-	-	-	1	40	60	100	EEC
1905IT011	Building Smart Cities	-	-	-	1	40	60	100	EEC
1905IT012	Industrial Safety for Engineers	-	-	-	1	40	60	100	EEC
1905IT013	Introduction to Fisheries Engineering	-	-	-	1	40	60	100	EEC
1905IT014	Political Science	-	-	-	1	40	60	100	EEC
1905IT015	Visual Communication	-	-	-	1	40	60	100	EEC

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