



# E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

NAGAPATTINAM – 611 002. TAMILNADU, INDIA

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai  
(Accredited by NAAC with 'A' Grade and NBA)

Email: [principal@egspec.org](mailto:principal@egspec.org) website: [www.egspec.org](http://www.egspec.org) Ph: 04365-251112

## MASTER OF COMPUTER APPLICATIONS

### Curriculum and Syllabi

Minimum Credits to be earned: 82

SEMESTER I									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CIA	ES	Total	
<b>Theory Course</b>									
2001CA101	Linear Algebra, Probability and Statistics	2	2	-	3	40	60	100	FC
2002CA102	Advanced Data structures and Algorithms	3	-	-	3	40	60	100	PC
2002CA103	Computer Communications and Networks	3	-	-	3	40	60	100	PC
2002CA104	Advanced Databases	3	-	-	3	40	60	100	PC
2002CA105	Python Programming	3	-	-	3	40	60	100	PC
2002CA106	Software Engineering and Project Management	3	-	-	3	40	60	100	PC
	Audit Course I*	2	-	-	-	100	-	100	AC
<b>Laboratory Course</b>									
2002CA107	Advanced Data structures and Algorithms Laboratory	-	-	4	2	50	50	100	PC
2002CA108	Python Programming Laboratory	-	-	4	2	50	50	100	PC
2004CA109	Life Skill I – Verbal Ability	-	-	2	1	100	-	100	EEC
<b>Total</b>		<b>19</b>	<b>2</b>	<b>10</b>	<b>23</b>	<b>540</b>	<b>460</b>	<b>1000</b>	

\*Audit course is optional

SEMESTER II									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CIA	ES	Total	
<b>Theory Course</b>									
2002CA201	Advanced Java Programming	3	-	-	3	40	60	100	PC
2002CA202	Mobile Technologies	3	-	-	3	40	60	100	PC
2002CA203	Data Mining Techniques	2	-	2	3	50	50	100	PC
2002CA204	Internet of Things	2	-	2	3	50	50	100	PC
2002CA205	Professional Practice and Ethics	3	-	-	3	40	60	100	PC
	<b>Elective – I</b>	3	-	-	3	40	60	100	PE
	Audit Course II*	2	-	-	-	100	0	100	AC
<b>Laboratory Course</b>									
2002CA206	Java and Web Programming Laboratory	-	-	4	2	50	50	100	PC
2002CA207	Mobile Application Development Lab	-	-	4	2	50	50	100	PC
2004CA208	Life Skill II- Aptitude I	-	-	2	1	100	-	100	EEC
<b>Total</b>		<b>18</b>	<b>0</b>	<b>14</b>	<b>23</b>	<b>560</b>	<b>440</b>	<b>1000</b>	

\*Audit course is optional

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,  
PRINCIPAL

E.G.S. Pillay Engineering College,  
Thethi, Nagore - 611 002,  
Nagapattinam (Dt) Tamil Nadu.



## E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

NAGAPATTINAM – 611 002. TAMILNADU, INDIA

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai  
(Accredited by NAAC with 'A' Grade and NBA)

Email: [principal@egspec.org](mailto:principal@egspec.org) website: [www.egspec.org](http://www.egspec.org) Ph: 04365-251112

SEMESTER III									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CIA	ES	Total	
<b>Theory Course</b>									
2002CA301	Cryptography and Network Security	2	-	2	3	50	50	100	PC
2002CA302	Distributed Systems and Cloud Computing	3	-	-	3	40	60	100	PC
2002CA303	Human Resource Management	3	-	-	3	40	60	100	PC
2002CA304	Data Analytics	3	-	-	3	40	60	100	PC
	Elective – II	3	-	-	3	40	60	100	PE
	Elective – III	2	-	2	3	50	50	100	PE
<b>Laboratory Course</b>									
2002CA305	Data Analytics Laboratory	-	-	4	2	50	50	100	PC
2002CA306	Distributed System and Cloud Laboratory	-	-	4	2	50	50	100	PC
2004CA307	Technical Seminar and Report Writing	-	-	2	1	50	50	100	EEC
2004CA308	Life Skill III-Aptitude II	-	-	2	1	100	-	100	EEC
<b>Total</b>		<b>16</b>	<b>0</b>	<b>16</b>	<b>24</b>	<b>510</b>	<b>490</b>	<b>1000</b>	

SEMESTER IV									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CIA	ES	Total	
2004CA401	Project Work	-	-	24	12	100	100	200	EEC
<b>Total</b>		<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>	<b>100</b>	<b>100</b>	<b>200</b>	

### LIST OF ELECTIVES

ELECTIVE I							
Course Code	Course Name	L	T	P	C	Category	
2003CA001	Research Methodology and IPR	3	0	0	3	PE	
2003CA002	Software Quality Assurance	3	0	0	3	PE	
2003CA003	Digital Image Processing	3	0	0	3	PE	
2003CA004	Computer Graphics and Animation	3	0	0	3	PE	
2003CA005	Software Testing	3	0	0	3	PE	



## E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

NAGAPATTINAM – 611 002. TAMILNADU, INDIA

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai  
(Accredited by NAAC with 'A' Grade and NBA)

Email: [principal@egspec.org](mailto:principal@egspec.org) website: [www.egspec.org](http://www.egspec.org) Ph: 04365-251112

SEMESTER III									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CIA	ES	Total	
<b>Theory Course</b>									
2002CA301	Cryptography and Network Security	2	-	2	3	50	50	100	PC
2002CA302	Distributed Systems and Cloud Computing	3	-	-	3	40	60	100	PC
2002CA303	Human Resource Management	3	-	-	3	40	60	100	PC
2002CA304	Data Analytics	3	-	-	3	40	60	100	PC
	Elective – II	3	-	-	3	40	60	100	PE
	Elective – III	2	-	2	3	50	50	100	PE
<b>Laboratory Course</b>									
2002CA305	Data Analytics Laboratory	-	-	4	2	50	50	100	PC
2002CA306	Distributed System and Cloud Laboratory	-	-	4	2	50	50	100	PC
2004CA307	Technical Seminar and Report Writing	-	-	2	1	50	50	100	EEC
2004CA308	Life Skill III-Aptitude II	-	-	2	1	100	-	100	EEC
<b>Total</b>		<b>16</b>	<b>0</b>	<b>16</b>	<b>24</b>	<b>510</b>	<b>490</b>	<b>1000</b>	

SEMESTER IV									
Course Code	Course Name	L	T	P	C	Maximum Marks			Category
						CIA	ES	Total	
2004CA401	Project Work	-	-	24	12	100	100	200	EEC
<b>Total</b>		<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>	<b>100</b>	<b>100</b>	<b>200</b>	

### LIST OF ELECTIVES

ELECTIVE I							
Course Code	Course Name	L	T	P	C	Category	
2003CA001	Research Methodology and IPR	3	0	0	3	PE	
2003CA002	Software Quality Assurance	3	0	0	3	PE	
2003CA003	Digital Image Processing	3	0	0	3	PE	
2003CA004	Computer Graphics and Animation	3	0	0	3	PE	
2003CA005	Software Testing	3	0	0	3	PE	

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,  
PRINCIPAL

E.G.S. Pillay Engineering College,  
Thethi, Nagore - 611 002  
Nagapattinam (Dt) Tamil Nadu



## E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

NAGAPATTINAM – 611 002. TAMILNADU, INDIA

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai  
(Accredited by NAAC with 'A' Grade and NBA)

Email: [principal@egspec.org](mailto:principal@egspec.org) website: [www.egspec.org](http://www.egspec.org) Ph: 04365-251112

### ELECTIVE II

Course Code	Course Name	L	T	P	C	Category
2003CA006	Machine Learning Techniques	3	0	0	3	PE
2003CA007	Artificial Intelligence	3	0	0	3	PE
2003CA008	Compiler Design	3	0	0	3	PE
2003CA009	Cognitive Computing	3	0	0	3	PE
2003CA010	Visualization Techniques	3	0	0	3	PE

### ELECTIVE III


Course Code	Course Name	L	T	P	C	Category
2003CA011	R Programming	2	0	2	3	PE
2003CA012	PHP Programming	2	0	2	3	PE
2003CA013	Java Server Pages	2	0	2	3	PE
2003CA014	.NET Programming	2	0	2	3	PE
2003CA015	Block chain Technologies	2	0	2	3	PE

### Bridge Courses

Course Code	Course Name	L	T	P	C	Category
<b>SEMESTER I</b>						
2001CA016	Mathematical Foundations of Computer Science	3	0	0	3	FC
2001CA017	Programming Concepts using C and C++	3	0	0	3	PC
2001CA018	Basic Data Structures	3	0	0	3	PC
2001CA019	C Programming and Data Structures Laboratory	0	0	4	2	PC
<b>TOTAL</b>		<b>9</b>	<b>0</b>	<b>4</b>	<b>11</b>	
<b>SEMESTER II</b>						
2001CA020	Computer Organizations and Architecture	3	0	0	3	PC
2001CA021	Operating Systems	3	0	0	3	PC
<b>TOTAL</b>		<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	
<b>SEMESTER III</b>						
2001CA022	Database Management Systems	3	0	0	3	PC
2001CA023	Database Management System Laboratory	0	0	4	2	PC
<b>TOTAL</b>		<b>3</b>	<b>0</b>	<b>4</b>	<b>5</b>	

FC- Foundation Course, PC- Professional Core, PE- Professional Elective, PEC- Employability Enhancement Course, EC- Elective Course

ATTESTED

  
Dr. S. RAMABALAN, M.E., Ph.D.,  
PRINCIPAL,  
E.G.S. Pillay Engineering College,  
Thethi, Nagore - 611 002,  
Nagapattinam (Dt) Tamil Nadu.