



SARADHA GANGADHARAN COLLEGE
(Recognized by UGC under Section 2(f) of the UGC Act 1956 as PG Institution)
(NAAC Accredited Institution)
(Affiliated to Pondicherry University)
(An ISO 9001:2015 Certified Institution)

PG - DEPARTMENT OF COMPUTER SCIENCE

CERTIFICATE COURSE IN GREEN COMPUTING (ADD-ON COURSE)

From the Session 2020-2021

- **Course Objective:** The main objective of this course is to provide students learn the fundamentals of Green Computing. The course will help the student to analyze the Green computing Grid Framework. It also enables them to gain knowledge on various case studies in Green Computing.

ELIGIBILITY FOR CERTIFICATE COURSE

- Students who have passed under graduate level in computer science.
- Students can take this Add-on course only during their graduation period.

WORKLOAD & DISTRIBUTION OF MARKS

- There will be one theory paper with 100 marks, out of which 75 marks will be based on Theory and 25 marks for Internal Assessment.
- There shall be 5 lectures per subject per week.
- Internal Assessment will be based on their performance in Assignments and Attendance.
- The candidate enrolled will be eligible for a certificate only if they score minimum 40 marks including theory and internal.

Instructions for paper setters

Examiner will be required to set **FIFTY (50) questions**. All the questions are in MCQ format (Multiple Choice Question). Each Question carries 1 ½ Marks. The students should answer all the **FIFTY(50) questions** compulsorily. Assignment on Case Study will be given 25 Marks.

Paper Code	Name	Exam Marks	Internal Marks	Max.Marks
CCGC-101	Green Computing	75	25	100



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GREEN COMPUTING

External Marks :75

Internal Marks: 25

Hours: 5 Hours

Total Hours:40

UNIT I FUNDAMENTALS

Green IT Fundamentals: Business, IT, and the Environment – Green computing: carbon foot print, scoop on power – Green IT Strategies: Drivers, Dimensions, and Goals – Environmentally Responsible Business: Policies, Practices, and Metrics.

UNIT II GREEN ASSETS AND MODELING

Green Assets: Buildings, Data Centers, Networks, and Devices – Green Business Process Management: Modeling, Optimization, and Collaboration – Green Enterprise Architecture – Environmental Intelligence – Green Supply Chains – Green Information Systems: Design and Development Models.

UNIT III GRID FRAMEWORK

Virtualization of IT systems – Role of electric utilities, Telecommuting, teleconferencing and teleporting – Materials recycling – Best ways for Green PC – Green Data center – Green Grid framework.

Assignment on Case study

The Environmentally Responsible Business Strategies (ERBS) – Case Study Scenarios for Trial Runs – Case Studies – Applying Green IT Strategies and Applications to a Home, Hospital, Packaging Industry and Telecom Sector.



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Sno	Name	Register No	9-Sep	10-Sep	11-Sep	15-Sep	16-Sep	17-Sep	18-Sep
1	BANUMATHY B	19PCS101	P	P	P	P	A	P	P
2	DEEPA A	19PCS102	P	P	P	P	P	P	P
3	GAUTHAM D	19PCS103	P	A	P	P	P	A	P
4	GUNALAKSHMI K	19PCS104	P	P	P	P	P	P	P
5	JAYAPRADHA J	19PCS105	P	P	P	P	P	P	P
6	LEENA S	19PCS106	P	P	P	P	P	P	P
7	LEVEL SELVIANMARY M	19PCS107	P	P	P	P	P	P	P
8	NIRUJA S	19PCS108	P	P	P	P	P	P	P
9	PAVITHRAN N	19PCS109	P	P	P	P	P	P	P
10	RATHNA A	19PCS110	P	P	P	P	A	P	P
11	SANDHIYA C	19PCS111	P	P	P	P	A	P	P
12	SATHISH K	19PCS112	P	P	P	P	P	P	P
13	SHURUTHI T	19PCS113	P	P	P	P	P	P	P



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Sno	Name	Register No	1- Dec	2- Dec	3-Dec	4- Dec	17- Dec	18- Dec	19- Dec	21- Dec	22- Dec
1	BANUMATHY B	19PCS101	P	A	P	P	P	P	A	A	A
2	DEEPA A	19PCS102	P	P	P	P	P	P	P	P	P
3	GAUTHAM D	19PCS103	P	P	A	P	P	P	P	P	P
4	GUNALAKSHMI K	19PCS104	P	P	A	P	P	P	P	P	P
5	JAYAPRADHA J	19PCS105	P	P	A	P	P	P	P	A	P
6	LEENA S	19PCS106	A	P	P	P	P	P	P	P	P
7	LEVEL SELVIANMARY M	19PCS107	P	P	P	P	A	A	P	P	A
8	NIRUJA S	19PCS108	P	P	P	P	P	P	P	P	P
9	PAVITHRAN N	19PCS109	A	P	P	P	P	P	A	P	P
10	RATHNA A	19PCS110	P	P	P	P	P	P	P	P	A
11	SANDHIYA C	19PCS111	P	P	P	P	P	P	P	P	P
12	SATHISH K	19PCS112	P	P	P	P	P	P	P	P	P
13	SHURUTHI T	19PCS113	P	A	P	P	P	P	P	P	P



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Sno	Name	Register No	4-Jan	5-Jan	6-Jan	11-Jan	12-Jan	18-Jan	19-Jan	1-Feb	2-Feb
1	BANUMATHY B	19PCS101	P	P	A	P	A	P	P	A	P
2	DEEPA A	19PCS102	A	P	A	P	P	P	P	P	P
3	GAUTHAM D	19PCS103	P	P	A	P	P	P	P	P	P
4	GUNALAKSHMI K	19PCS104	P	P	A	P	A	P	P	P	P
5	JAYAPRADHA J	19PCS105	P	P	A	P	A	P	P	P	P
6	LEENA S	19PCS106	P	P	A	P	P	P	P	P	P
7	LEVEL SELVIANMARY M	19PCS107	P	P	A	P	P	P	P	P	P
8	NIRUJA S	19PCS108	P	P	A	A	A	A	A	P	P
9	PAVITHRAN N	19PCS109	P	P	A	P	A	P	P	P	P
10	RATHNA A	19PCS110	P	P	A	P	P	P	P	P	P
11	SANDHIYA C	19PCS111	P	P	A	P	A	P	P	P	P
12	SATHISH K	19PCS112	P	P	A	P	A	P	P	P	P
13	SHURUTHI T	19PCS113	P	A	A	P	A	P	P	P	P



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Sno	Name	Register No	8-Feb	9-Feb	10-Feb	11-Feb	12-Feb	13-Feb
1	BANUMATHY B	19PCS101	P	P	P	P	P	P
2	DEEPA A	19PCS102	P	P	P	P	P	P
3	GAUTHAM D	19PCS103	P	P	P	P	P	P
4	GUNALAKSHMI K	19PCS104	P	P	P	P	P	P
5	JAYAPRADHA J	19PCS105	P	P	P	P	P	P
6	LEENA S	19PCS106	P	P	P	P	P	P
7	LEVEL SELVIANMARY M	19PCS107	P	P	P	P	P	P
8	NIRUJA S	19PCS108	P	P	P	P	P	A
9	PAVITHRAN N	19PCS109	P	P	P	P	P	P
10	RATHNA A	19PCS110	A	P	P	P	P	P
11	SANDHIYA C	19PCS111	P	P	P	P	P	P
12	SATHISH K	19PCS112	P	P	P	P	P	P
13	SHURUTHI T	19PCS113	P	P	P	P	P	P

S. No	Co-ordinator
1	B. Venba

J. Madhupriya
HOD
J. MADHUPRIYA, M.Phil., M.Tech
HOD, (P.G), Department of Computer science
Saradha Gangadharan College
PUDUCHERRY - 605 004

B. Venba
Co-Ordinator

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Lake Road, Velrampet, Puducherry - 4.

PG - DEPARTMENT OF COMPUTER SCIENCE

CERTIFICATE OF COMPLETION

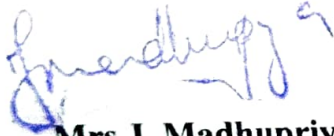
This is to certify that

SHURUTHI T

has successfully completed the add on course title with

“ Green Computing”

offered in the Academic Year 2020-2021



Mrs.J. Madhupriya

Head, PG- Dept. of Computer Science



Mrs.B. Venba

Co-ordinator



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PG-COMPUTER SCIENCE

Year : I Year Name of the Programme: Green Computing
Semester : I Semester (Nov'20-Feb'21)

SNO	NAME	REGISTER NO	30-Nov	1-Dec	2-Dec	3-Dec	4-Dec	14-Dec	15-Dec	16-Dec	17-Dec	18-Dec
1	CHANDRIKA V	20PCS201	P	P	P	P	P	A	P	P	P	A
2	GRACY @ SOUVETHA A	20PCS202	P	P	P	P	P	P	P	A	P	P
3	KEERTHANA A	20PCS203	P	P	P	P	P	P	P	P	P	P
4	NILAVARASAN G	20PCS204	P	P	P	P	P	P	P	P	A	P
5	NITHISH KUMAR V	20PCS205	P	P	P	P	P	P	P	P	P	P
6	VISHNU PRIYA M	20PCS206	P	A	P	P	P	P	A	P	P	P

SNO	NAME	REGISTER NO	6-Jan	7-Jan	8-Jan	9-Jan	11-Jan	12-Jan	19-Jan	20-Jan	21-Jan
1	CHANDRIKA V	20PCS201	P	P	P	A	P	P	A	P	P
2	GRACY @ SOUVETHA A	20PCS202	P	P	P	A	A	A	P	P	P
3	KEERTHANA A	20PCS203	P	P	A	P	P	A	P	P	P
4	NILAVARASAN G	20PCS204	P	P	P	A	P	A	A	P	P
5	NITHISH KUMAR V	20PCS205	A	A	A	A	A	A	P	P	P
6	VISHNU PRIYA M	20PCS206	A	P	P	P	A	A	P	P	P



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SNO	NAME	REGISTER NO	22-Jan	23-Jan	27-Jan	28-Jan	29-Jan	1-Feb	2-Feb	3-Feb	4-Feb	5-Feb	30-Jan
1	CHANDRIKA V	20PCS201	P	P	P	P	P	P	P	P	P	P	P
2	GRACY @ SOUVETHA A	20PCS202	P	P	A	A	P	A	P	P	P	P	P
3	KEERTHANA A	20PCS203	P	A	A	P	P	P	P	P	P	P	P
4	NILAVARASAN G	20PCS204	P	A	P	P	P	P	A	A	P	P	A
5	NITHISH KUMAR V	20PCS205	P	A	P	A	P	P	P	P	P	P	A
6	VISHNU PRIYA M	20PCS206	P	A	P	P	P	A	P	P	P	P	P

SNO	NAME	REGISTER NO	6-Feb	15-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	22-Feb	23-Feb
1	CHANDRIKA V	20PCS201	P	P	P	P	P	P	P	A	P
2	GRACY @ SOUVETHA A	20PCS202	P	P	A	P	P	P	P	P	P
3	KEERTHANA A	20PCS203	P	P	P	P	P	P	P	P	P
4	NILAVARASAN G	20PCS204	P	P	P	P	P	P	P	P	P
5	NITHISH KUMAR V	20PCS205	P	A	P	P	P	P	P	P	P
6	VISHNU PRIYA M	20PCS206	P	P	P	P	P	P	P	P	P

S. No	Co-Ordinator
1	D. Saraswathi

J. Madhupriya
HOD

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Mrs.J. Madhupriya

Head, PG- Dept. of Computer Science

Mr. D. Saraswathi

Co-ordinator