



**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030

Name : SWADEEP

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS Batch : 2019

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CHY1701	ENGINEERING CHEMISTRY	4.0	A	Nov-19	TheoryLab
CSE1001	PROBLEM SOLVING AND PROGRAMMING	3.0	S	Nov-19	Lab
EEE1001	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	3.0	S	Nov-19	TheoryLab
ENG1902	TECHNICAL ENGLISH - II	2.0	A	Nov-19	Lab
HUM1021	ETHICS AND VALUES	2.0	B	Nov-19	Theory
MAT1011	CALCULUS FOR ENGINEERS	4.0	S	Nov-19	TheoryLab
STS1201	INTRODUCTION TO PROBLEM SOLVING	1.0	B	Nov-19	Soft Skill
CHY1002	ENVIRONMENTAL SCIENCES	3.0	B	Jun-20	Theory
CSE1002	PROBLEM SOLVING AND OBJECT ORIENTED PROGRAMMING	3.0	S	Jun-20	Lab
CSE1003	DIGITAL LOGIC AND DESIGN	4.0	S	Jun-20	TheoryLab
CSE2004	DATABASE MANAGEMENT SYSTEMS	4.0	A	Jun-20	TheoryLabProject
JAP1001	JAPANESE FOR BEGINNERS	2.0	S	Jun-20	Theory
MAT2001	STATISTICS FOR ENGINEERS	4.0	A	Jun-20	TheoryLab
ONL1006	MACHINE LEARNING USING PYTHON	3.0	S	Jun-20	OC
ONL1007	ARTIFICIAL INTELLIGENCE FOR BEGINNERS	3.0	A	Jun-20	OC
PHY1701	ENGINEERING PHYSICS	4.0	S	Jun-20	TheoryLab
STS1202	INTRODUCTION TO QUANTITATIVE, LOGICAL AND VERBAL ABILITY	1.0	S	Jun-20	Soft Skill
CSE1004	NETWORK AND COMMUNICATION	4.0	A	Jan-21	TheoryLab
CSE2001	COMPUTER ARCHITECTURE AND ORGANIZATION	3.0	A	Jan-21	Theory
CSE2003	DATA STRUCTURES AND ALGORITHMS	4.0	S	Jan-21	TheoryLabProject
CSE2006	MICROPROCESSOR AND INTERFACING	4.0	S	Jan-21	TheoryLabProject
EEE3001	CONTROL SYSTEMS	4.0	S	Jan-21	TheoryLab
MAT2002	APPLICATIONS OF DIFFERENTIAL AND DIFFERENCE EQUATIONS	4.0	A	Jan-21	TheoryLab
PHY1901	INTRODUCTION TO INNOVATIVE PROJECTS	1.0	S	Jan-21	Theory
STS2201	NUMERICAL ABILITY AND COGNITIVE INTELLIGENCE	1.0	S	Jan-21	Soft Skill
CSE2005	OPERATING SYSTEMS	4.0	A	Jun-21	TheoryLabProject
CSE2020	INTRODUCTION TO CYBER PHYSICAL SYSTEMS	3.0	B	Jun-21	TheoryLab
CSE2021	DISTRIBUTED REAL-TIME SYSTEMS	4.0	A	Jun-21	TheoryLabProject
CSE4015	HUMAN COMPUTER INTERACTION	4.0	B	Jun-21	TheoryProject
EXC1092	CONTRIBUTION TO OPEN SOURCE SOFTWARE	2.0	P	Jun-21	ECA
HUM1013	POPULATION STUDIES	3.0	A	Jun-21	Theory
MAT1014	DISCRETE MATHEMATICS AND GRAPH THEORY	4.0	S	Jun-21	Theory
MGT1022	LEAN START-UP MANAGEMENT	2.0	B	Jun-21	TheoryProject
STS2202	ADVANCED APTITUDE AND REASONING SKILLS	1.0	S	Jun-21	Soft Skill
CSE2034	CYBER PHYSICAL SYSTEM DESIGN	4.0	A	Dec-21	TheoryLab
CSE2035	COMMUNICATION FOR CYBER PHYSICAL SYSTEMS	4.0	A	Dec-21	TheoryProject
CSE3070	MACHINE LEARNING AND ITS APPLICATIONS	4.0	S	Dec-21	TheoryLabProject
CSE3076	CONTEXT-AWARE COMPUTING	4.0	S	Dec-21	TheoryLabProject
CSE3505	FOUNDATIONS OF DATA ANALYTICS	4.0	A	Dec-21	TheoryLabProject
MEE3023	ROBOTICS AND PROGRAMMING	4.0	S	Dec-21	TheoryLabProject
STS3201	PROGRAMMING SKILLS FOR EMPLOYMENT	1.0	S	Dec-21	Soft Skill
CSE1007	JAVA PROGRAMMING	4.0	S	May-22	TheoryLab
CSE1901	TECHNICAL ANSWERS FOR REAL WORLD PROBLEMS (TARP)	2.0	S	May-22	TheoryProject
CSE2026	CLOUD COMPUTING	4.0	S	May-22	TheoryLabProject
CSE3063	SOFTWARE ENGINEERING PRINCIPLES	3.0	S	May-22	TheoryLab
CSE3112	SENSORS AND ACTUATORS	3.0	B	May-22	TheoryLab
CSE3506	ESSENTIALS OF DATA ANALYTICS	4.0	S	May-22	TheoryLabProject
MGT1040	PERSONAL FINANCIAL PLANNING	3.0	A	May-22	TheoryProject



**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030		Name : SWADEEP			
Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS Batch : 2019					
Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
STS3204	JAVA PROGRAMMING AND SOFTWARE ENGINEERING FUNDAMENTALS	1.0	S	May-22	Soft Skill
CSE1902	INDUSTRIAL INTERNSHIP	1.0	S	Nov-22	Project
CSE1903	COMPREHENSIVE EXAMINATION	1.0	B	Nov-22	Project
CSE1904	CAPSTONE PROJECT	12.0	S	Apr-23	Project

**CGPA : 9.46**

The medium of instruction is English.

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Final Assessment Test.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent / Debarred in Final Assessment Test/ Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course Withdrawn							

**CGPA Calculation:**

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

CGPA is obtained by dividing the sum of product of Grade Point (GP<sub>i</sub>) earned and Credits (C<sub>i</sub>) of a registered course for 'n' number of courses by total number of credits registered.

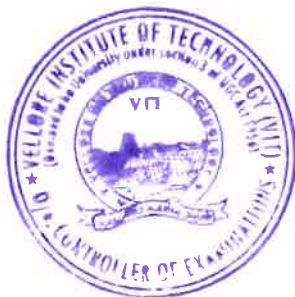
$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By:

Verified By:

DATE : 22-Jun-2023



Controller of Examinations



**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CHY1701	ENGINEERING CHEMISTRY	4.0	A	Nov-19	TheoryLab
CSE1001	PROBLEM SOLVING AND PROGRAMMING	3.0	S	Nov-19	Lab
EEE1001	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	3.0	S	Nov-19	TheoryLab
ENG1902	TECHNICAL ENGLISH - II	2.0	A	Nov-19	Lab
HUM1021	ETHICS AND VALUES	2.0	B	Nov-19	Theory
MAT1011	CALCULUS FOR ENGINEERS	4.0	S	Nov-19	TheoryLab
STS1201	INTRODUCTION TO PROBLEM SOLVING	1.0	B	Nov-19	Soft Skill

**GPA : 9.37**

The medium of instruction is English.

**CGPA : 9.37**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GP<sub>i</sub>) earned and Credits (C<sub>i</sub>) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



Controller of Examinations



**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CHY1002	ENVIRONMENTAL SCIENCES	3.0	B	Jun-20	Theory
CSE1002	PROBLEM SOLVING AND OBJECT ORIENTED PROGRAMMING	3.0	S	Jun-20	Lab
CSE1003	DIGITAL LOGIC AND DESIGN	4.0	S	Jun-20	TheoryLab
CSE2004	DATABASE MANAGEMENT SYSTEMS	4.0	A	Jun-20	TheoryLabProject
JAP1001	JAPANESE FOR BEGINNERS	2.0	S	Jun-20	Theory
MAT2001	STATISTICS FOR ENGINEERS	4.0	A	Jun-20	TheoryLab
ONL1006	MACHINE LEARNING USING PYTHON	3.0	S	Jun-20	OC
ONL1007	ARTIFICIAL INTELLIGENCE FOR BEGINNERS	3.0	A	Jun-20	OC
PHY1701	ENGINEERING PHYSICS	4.0	S	Jun-20	TheoryLab
STS1202	INTRODUCTION TO QUANTITATIVE, LOGICAL AND VERBAL ABILITY	1.0	S	Jun-20	Soft Skill

**GPA : 9.61**

The medium of instruction is English.

**CGPA : 9.51**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GP<sub>i</sub>) earned and Credits (C<sub>i</sub>) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



Controller of Examinations





**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CSE1004	NETWORK AND COMMUNICATION	4.0	A	Jan-21	TheoryLab
CSE2001	COMPUTER ARCHITECTURE AND ORGANIZATION	3.0	A	Jan-21	Theory
CSE2003	DATA STRUCTURES AND ALGORITHMS	4.0	S	Jan-21	TheoryLabProject
CSE2006	MICROPROCESSOR AND INTERFACING	4.0	S	Jan-21	TheoryLabProject
EEE3001	CONTROL SYSTEMS	4.0	S	Jan-21	TheoryLab
MAT2002	APPLICATIONS OF DIFFERENTIAL AND DIFFERENCE EQUATIONS	4.0	A	Jan-21	TheoryLab
PHY1901	INTRODUCTION TO INNOVATIVE PROJECTS	1.0	S	Jan-21	Theory
STS2201	NUMERICAL ABILITY AND COGNITIVE INTELLIGENCE	1.0	S	Jan-21	Soft Skill

**GPA : 9.56**

The medium of instruction is English.

**CGPA : 9.53**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GP<sub>i</sub>) earned and Credits (C<sub>i</sub>) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



U. Unim...

Controller of Examinations



**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CSE2005	OPERATING SYSTEMS	4.0	A	Jun-21	TheoryLabProject
CSE2020	INTRODUCTION TO CYBER PHYSICAL SYSTEMS	3.0	B	Jun-21	TheoryLab
CSE2021	DISTRIBUTED REAL-TIME SYSTEMS	4.0	A	Jun-21	TheoryLabProject
CSE4015	HUMAN COMPUTER INTERACTION	4.0	B	Jun-21	TheoryProject
EXC1092	CONTRIBUTION TO OPEN SOURCE SOFTWARE	2.0	P	Jun-21	ECA
HUM1013	POPULATION STUDIES	3.0	A	Jun-21	Theory
MAT1014	DISCRETE MATHEMATICS AND GRAPH THEORY	4.0	S	Jun-21	Theory
MGT1022	LEAN START-UP MANAGEMENT	2.0	B	Jun-21	TheoryProject
STS2202	ADVANCED APTITUDE AND REASONING SKILLS	1.0	S	Jun-21	Soft Skill

**GPA : 8.84**

The medium of instruction is English.

**CGPA : 9.35**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GP<sub>i</sub>) earned and Credits (C<sub>i</sub>) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



Controller of Examinations



**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CSE2034	CYBER PHYSICAL SYSTEM DESIGN	4.0	A	Dec-21	TheoryLab
CSE2035	COMMUNICATION FOR CYBER PHYSICAL SYSTEMS	4.0	A	Dec-21	TheoryProject
CSE3070	MACHINE LEARNING AND ITS APPLICATIONS	4.0	S	Dec-21	TheoryLabProject
CSE3076	CONTEXT -AWARE COMPUTING	4.0	S	Dec-21	TheoryLabProject
CSE3505	FOUNDATIONS OF DATA ANALYTICS	4.0	A	Dec-21	TheoryLabProject
MEE3023	ROBOTICS AND PROGRAMMING	4.0	S	Dec-21	TheoryLabProject
STS3201	PROGRAMMING SKILLS FOR EMPLOYMENT	1.0	S	Dec-21	Soft Skill

**GPA : 9.52**

The medium of instruction is English.

**CGPA : 9.39**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GPi) earned and Credits (Ci) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



Controller of Examinations



**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CSE1007	JAVA PROGRAMMING	4.0	S	May-22	TheoryLab
CSE1901	TECHNICAL ANSWERS FOR REAL WORLD PROBLEMS (TARP)	2.0	S	May-22	TheoryProject
CSE2026	CLOUD COMPUTING	4.0	S	May-22	TheoryLabProject
CSE3063	SOFTWARE ENGINEERING PRINCIPLES	3.0	S	May-22	TheoryLab
CSE3112	SENSORS AND ACTUATORS	3.0	B	May-22	TheoryLab
CSE3506	ESSENTIALS OF DATA ANALYTICS	4.0	S	May-22	TheoryLabProject
MGT1040	PERSONAL FINANCIAL PLANNING	3.0	A	May-22	TheoryProject
STS3204	JAVA PROGRAMMING AND SOFTWARE ENGINEERING FUNDAMENTALS	1.0	S	May-22	Soft Skill

**GPA : 9.63**

The medium of instruction is English.

**CGPA : 9.42**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GP<sub>i</sub>) earned and Credits (C<sub>i</sub>) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



Controller of Examinations





**Office of the Controller of Examinations**

**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CSE1902	INDUSTRIAL INTERNSHIP	1.0	S	Nov-22	Project
CSE1903	COMPREHENSIVE EXAMINATION	1.0	B	Nov-22	Project

**GPA : 9.00**

The medium of instruction is English.

**CGPA : 9.42**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GPI) earned and Credits (Ci) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



U. Um...

Controller of Examinations



**Transcript**

Reg. No : 19BPS1030 Name : SWADEEP

Admitted Year : 2019

Programme & Branch : B.TECH. - COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN CYBER PHYSICAL SYSTEMS

Course Code	Course Title	Credits	Grade	Exam Held	Paper Type
CSE1904	CAPSTONE PROJECT	12.0	S	Apr-23	Project

**GPA : 10.00**

The medium of instruction is English.

**CGPA : 9.46**

**Grading System :**

A letter grade on ten point scale is awarded to a student in a course based on the total marks obtained from Continuous Assessment Tests and Term End Examination.

Letter Grade	S	A	B	C	D	E	F	N
Grade Point	10	9	8	7	6	5	0	0
F Grade	Failed in a Course							
N Grade	Absent/ Debarred in Term End Examination / Course Incomplete							
P Grade	Passed in a Pass / Fail Course							
U Grade	Successfully completed an Audit Course							
W Grade	Additional Course withdrawn							

Grades S, A, B, C, D, E, P and U Indicates successful completion of the Course

**CGPA Calculation:**

CGPA is obtained by dividing the sum of product of Grade Point (GPI) earned and Credits (Ci) of a registered course for 'n' number of courses by total number of credits registered.

$$\frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

Pass Course (P Grade), Audit Course (U Grade) are not counted for the calculation of GPA or CGPA.

Processed By :

Verified By :

DATE : 22-Jun-2023



U. Um...

Controller of Examinations



**VIT<sup>®</sup>**  
**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)

**PROVISIONAL CERTIFICATE**

**SR000000009882**

Register No. : **19BPS1030**

This is to certify that **SWADEEP**

has qualified for the degree of **BACHELOR OF TECHNOLOGY**

he / she having passed the above Degree Examination held in **Apr-2023**


as follows :


Branch of study : **COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN  
CYBER PHYSICAL SYSTEMS**

Total Credits Registered : **160**

Total Credits Earned : **160**

Cumulative Grade Point Average (CGPA) : **9.46**

Processed By : 

Verified By : 

DATE : **22-Jun-2023**





**Controller of Examinations**