Ref: KKWIEE&R/Comp./Transcript/2022 Date: 22/11/2022

# To,

The Graduate Admission Officer.

Subject: Official Transcript of **Mr. Shreyas D. Kalvankar**

Dear Sir/Madam,

**Mr. Shreyas D. Kalvankar** is a bonafide student of this college from **2017 to 2021** for the four year **Bachelor Degree** Course in **Computer Engineering** of the **Savitribai Phule Pune** **University. He** has completed Bachelor Degree Course in Computer Engineering.

Please find enclosed herewith his official transcripts, which includes brief information about the University, teaching scheme, examination scheme and grading scheme and his performance in the said course.

To facilitate the review of application, here is a brief summary of the salient feature of our institution. The Karmaveer Kakasaheb Wagh Institute of Engineering Education & Research (formerly - K. K. Wagh College of Engineering, Nashik) is a pioneer institution of engineering in Nashik District and is well known throughout India.

This institute is permanently affiliated to the Savitribai Phule Pune University (University of Pune) and is approved by the All India Council for Technical Education (AICTE), New Delhi. Accredited by National Assessment & Accreditation Council (NAAC) with ‘A’ Grade. Additionally, NBA-AICTE (New Delhi) accredited twice. The Institution of Engineers (India) has also accredited the institute. It is ranked amongst the top five engineering colleges affiliated to the Savitribai Phule Pune University. The institute offers Bachelor Degree courses in nine branches namely Computer, Information Technology, Electronics, Electrical, Mechanical, Production, Electronics & Telecommunication, Chemical and Civil Engineering, duration of which is four years.It also conducts, Post Graduate courses in Engineering (Electronics & Telecommunication, Electrical, Production, Civil and Computer), Management (MBA) and Computer Application (MCA). The **medium of instruction is English.**

The Institute has recently signed Memorandum of Understanding (MoU) with University of Massachusetts, Lowell, USA and Lawrence Technical University, Michigan, USA. Similar arrangement is also being worked out with other Universities abroad, to explore opportunities for collaboration in the field of Research and Development and exchange of staff /students.

Admission to the course is based on the marks obtained in the All India Engineering Entrance Examination (AIEEE) and Common Entrance Examination (CET). Also, Direct Admission to 2nd year Engineering is based on the marks obtained in the final year diploma course. It is a sense of pride and satisfaction for us that most of our outgoing students are either well-placed in the corporate world or are in the quest of more knowledge pursuing higher education in India and abroad. I can assure you that he will become an asset to your institute. We wish him all the best for his future endeavors.

Yours Sincerely,

**SAVITRIBAI PHULE PUNE UNIVERSITY**

“The University stands for humanism and tolerance, for reason, for adventure of ideas and for the search of truth. It stands for the forward march of the human race towards even higher objectives. If the universities discharge their duties adequately then it is well with the nation and the people.”

- Jawaharlal Nehru

These words of Jawaharlal Nehru, the first prime minister of The Republic of India, embody in them the guiding principle of Pune University. Established in 1948, the university has since become one of the leading centers for research and teaching in the country. The 411-acre campus is located in the northwestern part of Pune. The placid environs and state of the art facilities provide it's numerous students with an ideal atmosphere to pursue research in various areas of Science, Arts, Commerce and Languages. The University houses 40 departments, which provide a wide array of academic programs. Though a young centre, the university has made a significant impact in various areas of research and teaching, and continues to strive for excellence.

The Savitribai Phule Pune University (formerly University of Poona) was established under the Poona University Act, passed by the Bombay Legislature on 10th February 1948. In the same year, Dr. M. R. Jayakar assumed office as the first Vice Chancellor of the university. Shri. B. G. Kher, Chief Minister and Education Minister, Govt. of Bombay, took a keen interest in setting apart a beautiful campus for the university. As a result of his efforts, a campus extending over 411 acres was allocated to the university in early 1950.

Initially the university had a jurisdiction extending over 12 districts of western Maharashtra. However, with the establishment of the Shivaji University, Kolhapur, in 1964, the jurisdiction of the university was restricted to 5 districts, namely Pune, Ahmednagar, Nashik, Dhule and Jalgaon. Out of these, two districts - Dhule and Jalgaon are now attached to the North Maharashtra University established in August 1990.

During the year 1949, there were only 18 colleges affiliated to the university, with an enrollment of over 8000 students. Thereafter, the number of colleges increased, and in 1994-95, the university had 41 post- graduate departments, 526 affiliated colleges and 330 recognized institutions, with an enrollment of more than five lakhs students studying in 60 Post Graduate departments and Research Centres and Interdisciplinary Centres.

Savitribai Phule Pune University is a host to the largest number of International Students all over India and continues its distinction as the most preferred destination for International students coming to India. The number ranges as large as about 14,000 students from 102 countries. Savitribai Phule Pune University is currently in the process of establishing its branch campus in U.A.E. International Centre at the Savitribai Phule Pune University operates as a single window cell for all affairs related to International students. The International Centre is the first of its kind among the Indian Universities and is a model for all other Universities to follow.

**DEPARTMENT OF COMPUTER ENGINEERING**

The Department of Computer Engineering at the K. K. Wagh Institute of Engineering Education and Research, Nashik was established in the year 1984. Since then, especially in the last fifteen years of the IT revolution, the department has taken long strides and is now among one of the best departments in the University. The Department has well furnished laboratories equipped with state-of-the-art hardware and software resources, instruction halls, a seminar hall and tutorial and faculty rooms. The Department has a blend of experienced and young faculty members who also work as mentors to the equally diligent, hardworking and intelligent students.

The Department offers four years Bachelors Degree Program in Computer Engineering with an intake of 120, two years Post Graduate Degree Program in Masters of Computer Engineering with an intake of 18 and a research center in Computer Engineering wherein Doctoral program is also offered. Currently there are 550 plus students are studying in department. Various activities and events such as Seminars, workshops, Conferences, symposiums, Short term training and certifications, Lecture programs, programming, quiz, project and web designing competitions are organized by the students under the guidance of faculty members through students’ club named as Debuggers’ club established in the year 1988, student branch of CSI established in the year 1996 and IBM’s center of Excellence established in the year 2010. Around 250+ students have obtained certification for IBM DB2 and RAD From IBM. Student group has won the first prize in IBM TGMC, a National level completion organized by IBM wherein 24000 students from 800+ colleges participated.

The department has excellent track record of University results as well as placements in industries. Our students have obtained ranks in the University examinations. Several fortune 500 IT industries such as TCS, NVIDIA, Accenture, Infosys, Wipro, Persistent Systems, Zensar, Patni Computers, L & T Info-tech, KPIT etc. visit our campus for campus Interviews and almost all eligible students are placed in these Industries. Many of our alumni are working at key positions in industries in India and abroad such as Oracle, IBM, GE, Microsoft, Yahoo etc. Many of our students have passed various competitive examinations such as GATE, GRE, Tofel, CAT, MAT etc with good scores and secured their admissions in premier educational Institutions in India and Universities abroad.

The Degree programme is spread over four years with two semesters in each year. Students study five theory courses and work on assignments in two or three laboratory courses in each semester. The first year of engineering is common to all disciplines. The students learn basic courses in Computer Engineering, such as Discrete Structures, Data Structures, Digital Logic and Microprocessors in Second Year Engineering. The courses such as Data Bases, Software Engineering, Signal Processing, Computer networks and Theory of Computation are offered in Third Year Engineering. Students present seminar on topic as per their interest and also carry out a mini project in a group of 3/4 students. In the Final Year Engineering students not only study core courses such as Algorithms, Compilers, Object Oriented Modeling, Advanced Computer Architecture, Distributed Operating Systems, but also choose elective courses as per their interest. Students’ also carryout project work geared to the needs of the industry.

The curriculum has in all thirty nine theoretical courses spread over the period of four years and makes the student conversant and provides an in depth knowledge.

We strive to impart basic knowledge of the vast area of Computers, which serves as the most apposite platform for students to pursue higher studies in their areas of interest.

**Grading System**

The following is the detailed examination scheme prescribed for the degree course in Computer Engineering of the Savitribai Phule Pune University.

**Note:**

1. All subjects are compulsory, except in the final year, where the student chooses the project and elective in the seventh and eighth semester.
2. Each semester is of sixteen weeks' duration; there are eight such semesters.
3. Each lecture is of one-hour duration.
4. Theory papers, Term Work, Oral and Practical examinations require a minimum of 40% marks for passing.
5. The Savitribai Phule Pune University uses the Grade Point Average (GPA) system of the student in a year to award grades as follows:

|  |  |  |
| --- | --- | --- |
| **Grade Points** | **Final Grade** | **Grade** |
| 09.00 – 10.00 | O | Outstanding |
| 08.50 – 08.99 | A+ | Excellent |
| 07.50 – 08.49 | A | Very Good |
| 06.50 – 07.49 | B+ | Good |
| 05.50 – 06.49 | B | Above Average |
| 04.25 – 05.49 | C | Average |
| 04.00 – 04.24 | P | Pass |
| 00.00 – 03.99 | F | Fail |

1. The class shall be awarded to a student according to the CGPA. The award of the class will be as follows:

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **CGPA** | **Class of the Degree awarded** |
| 1 | 7.75 or more than 7.75 | First Class with Distinction |
| 2 | 6.75 or more but less than 7.75 | First Class |
| 3 | 6.25 or more but less than 6.75 | Higher Second Class |
| 4 | 5.5 or more but less than 6.25 | Second Class |

1. A student can be awarded a maximum of 10 marks to the total marks of the year as grace marks to obtain a class and maximum of 15 marks to clear a subject head as per ordinances of Savitribai Phule Pune University.

**First Year of Computer Engineering (F.E) Year of Passing: 2018  
Name: Kalvankar Shreyas Darshan Seat No.: F150130327**

**SEMESTER I**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Total Credits** | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR/ DRG** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** |
| Engineering Mathematics-I | 4 | 1 | - | 50 | 50 | 25 | - | - | **125** | **05** | 05 | O | **50** |
| Engineering Chemistry | 4 | - | 2 | 50 | 50 | 25 | - | - | **125** | **05** | 05 | O | **50** |
| Engineering Graphics-I | 3 | - | 2 | 50 | 50 | - | - | - | **100** | **04** | 04 | O | **40** |
| Basic Electrical Engg | 3 | - | 2 | 50 | 50 | 25 | - | - | **125** | **04** | 04 | A | **32** |
| Basic Civil & Env. Engg. | 3 | - | 2 | 50 | 50 | 25 | - | - | **125** | **04** | 04 | O | **40** |
| Fundamentals of Prog. Lang.I | 1 | - | 2 | - | - | - | 50 | - | **50** | **02** | 02 | O | **20** |
| Workshop Practices | - | - | 2 | - | - | 50 | - | - | **50** | **01** | 01 | O | **10** |
| **TOTAL** | **18** | **1** | **12** | **250** | **250** | **150** | **50** | **-** | **700** | **25** | **25** | **O** | **242** |

**SEMESTER – II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Total Credits** | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR/ DRG** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** |
| Engineering Mathematics-II | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | 04 | O | **40** |
| Engineering Physics | 4 | - | 2 | 50 | 50 | 25 | - | - | **125** | **05** | 05 | O | **50** |
| Basic Mech. Engg. | 3 | - | 2 | 50 | 50 | 25 | - | - | **125** | **04** | 04 | O | **40** |
| Engineering Mechanics | 4 | - | 2 | 50 | 50 | 25 | - | - | **125** | **05** | 05 | O | **50** |
| Basic Electx. Engg. | 3 | - | 2 | 50 | 50 | 25 | - | - | **125** | **04** | 04 | O | **40** |
| Fundamentals of Prog.Lang.II | 1 | - | 2 | - | - | - | 50 | - | **50** | **02** | 02 | A | **16** |
| Engineering Graphics II | - | - | 2 | - | - | 50 | - | - | **50** | **01** | 01 | O | **10** |
| **TOTAL** | **19** | **-** | **12** | **250** | **250** | **150** | **50** | **-** | **700** | **25** | **25** | **O** | **246** |

First Year SGPA: 9.76 Grade: O Total Credits Earned: 50

Abbreviations: L – Lectures, PR – Practical, T – Tutorial, OR – Oral, TW – Term Work, DRG - Drawing

**Second Year of Computer Engineering (S.E.) Year of Passing: 2019  
Name: Kalvankar Shreyas Darshan Seat No.: S150134257**

**SEMESTER – III**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Credits** | | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** | **L+T** | **PR** |
| Discrete Mathematics | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | O | **40** |
| Digital Electx. & Logic Design | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | A | **40** |
| Data Structures & Algorithms | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | A+ | **36** |
| Comp. Organ. & Archi. | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | A+ | **36** |
| Object Oriented Prog. | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | O | **40** |
| Digital Electronics Lab. | - | - | 2 | - | - | 25 | 50 | - | **75** | **-** | **01** | 01 | O | **10** |
| Data Struc. Lab. | - | - | 4 | - | - | 25 | 50 | - | **75** | **-** | **02** | 02 | O | **20** |
| Object Oriented Progr. Lab. | **-** | **-** | 2 | **-** | **-** | 25 | 50 | **-** | **75** | **-** | **01** | 01 | O | **10** |
| Soft Skills | **-** | **-** | 2 | **-** | **-** | 25 | - | **-** | **25** | **-** | **01** | 01 | O | **10** |
| Audit Course I | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | P | **-** |
| **TOTAL** | **20** | **-** | **10** | **250** | **250** | **100** | **150** | **-** | **750** | **20** | **05** | **25** | **O** | **242** |

**SEMESTER – IV**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Credits** | | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** | **L+T** | **PR** |
| Engineering Mathematics III | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | O | **40** |
| Comp. Graphics | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | O | **40** |
| Adv. Data Struc. | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | A+ | **36** |
| Microprocessor | 4 | - | - | 50 | 50 | - | - | - | **100** | **04** | - | 04 | A+ | **36** |
| Principles of Prog. Lang. | 3 | - | - | 50 | 50 | - | - | - | **100** | **03** | - | 03 | O | **30** |
| Engineering Mathematics III | - | 1 | - | - | - | 25 | - | - | **25** | **01** | - | 01 | O | **10** |
| Computer Graphics Lab | - | - | 2 | - | - | 25 | 50 | - | **75** | **-** | **01** | 01 | O | **10** |
| Advanced Data Structures Lab. | - | - | 4 | - | - | 25 | 50 | - | **75** | **-** | **02** | 02 | O | **20** |
| Micro. Lab | **-** | **-** | 4 | **-** | **-** | 25 | 50 | **-** | **75** | **-** | **02** | 02 | O | **20** |
| Audit Course III | **-** | **-** | - | **-** | **-** | - | - | **-** | **-** | **-** | **-** | - | P | **-** |
| **TOTAL** | **19** | **1** | **10** | **250** | **250** | **100** | **150** | **-** | **750** | **20** | **05** | **25** | **O** | **242** |

Second Year SGPA: 9.52 Grade: O Total Credits Earned: 50

Abbreviations: L – Lectures, PR – Practical, T – Tutorial, OR – Oral, TW – Term Work, DRG - Drawing

**Third Year of Computer Engineering (T.E.) Year of Passing: 2020**

# Name: Kalvankar Shreyas Darshan Seat No.: T150134265

**SEMESTER – V**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Credits** | | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** | **L+T** | **PR** |
| Theory of Computation | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | B+ | 21 |
| Database Mgm. Systems | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Software Engg. & Project Mgm | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | A+ | 27 |
| Info. Systems & Engg. Econ. | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | A+ | 27 |
| Computer Networks | 4 | - | - | 30 | 70 | - | - | - | **100** | **04** | - | 04 | A+ | 36 |
| Skills Dev. Lab | - | 2 | 4 | - | - | 50 | - | - | **50** | **02** | - | 02 | O | 20 |
| - | - | 50 | **50** | **-** | 02 | 02 | O | 20 |
| Database Mgm. Systems Lab. | - | - | 4 | - | - | 25 | 50 | - | **75** | **-** | **02** | 02 | O | 20 |
| Computer Networks | **-** | **-** | 2 | **-** | **-** | 25 | 50 | **-** | **75** | **-** | **01** | 01 | O | 10 |
| Audit Course III | **-** | **-** | - | **-** | **-** | - | - | **-** | **-** | **-** | **-** | - | P | - |
| **TOTAL** | **16** | **2** | **10** | **150** | **350** | **100** | **100** | **50** | **750** | **18** | **05** | **23** | **O** | **211** |

**SEMESTER – VI**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Credits** | | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** | **L+T** | **PR** |
| Design & Analy. of Algo. | 4 | - | - | 30 | 70 | - | - | - | **100** | **04** | - | 04 | A+ | 36 |
| Sys. Prog. & Operating Sys. | 4 | - | - | 30 | 70 | - | - | - | **100** | **04** | - | 04 | A+ | 36 |
| Embed. Sys. & Inet. of Things | 4 | - | - | 30 | 70 | - | - | - | **100** | **04** | - | 04 | O | 40 |
| Soft. Modeling & Design | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Web Tech. | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Seminar & Tech. Comm. | - | 1 | - | - | - | 50 | - | - | **50** | **01** | - | 01 | O | 10 |
| Web Tech. Lab | - | - | 2 | - | - | 25 | 50 | - | **75** | **-** | 01 | 01 | O | 10 |
| SP & OS Lab. | - | - | 4 | - | - | 25 | - | - | **25** | **-** | 01 | 01 | O | 10 |
| - | 50 | - | **50** | **-** | 01 | 01 | O | 10 |
| ES & IOT Lab. | - | - | 2 | - | - | 50 | - | - | **50** | - | 01 | 01 | O | 10 |
| Audit Course IV | **-** | **-** | - | **-** | **-** | - | - | **-** | **-** | **-** | **-** | - | P | - |
| **Total** | **18** | **1** | **8** | **150** | **350** | **150** | **100** | **-** | **750** | **19** | **04** | **23** | **O** | **222** |

Third Year SGPA: 9.41 Grade: O Total Credits Earned: 46

Abbreviations: L – Lectures, PR – Practical, T – Tutorial, OR – Oral, TW – Term Work, DRG – Drawing

**Fourth Year of Computer Engineering (B.E.) Year of Passing: 2021**

# Name: Kalvankar Shreyas Darshan Seat No.: B150134261

**SEMESTER – VII**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Credits** | | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** | **L +T** | **PR** |
| High Performance Computing | 4 | - | - | 30 | 70 | - | - | - | **100** | **04** | - | 04 | O | 40 |
| Artificial Intel. & Robotics | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Data Analytics | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Data Mining and Warehousing | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Software Testing & Quality Assurance | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Laboratory Practice I | - | - | 4 | - | - | 50 | 50 | - | **100** | **-** | 02 | 02 | O | 20 |
| Laboratory Practice II | - | - | 4 | - | - | 50 | - | 50 | **100** | **-** | 02 | 02 | O | 20 |
| Project Work Stage I | - | - | 2 | - | - | - | - | 50 | **50** | **-** | **02** | 02 | O | 20 |
| **TOTAL** | **16** | **-** | **10** | **150** | **350** | **100** | **50** | **100** | **750** | **16** | **06** | **22** |  | **220** |

**SEMESTER – VIII**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **Hrs./Week** | | | **Marks** | | | | | **Total** | **Credits** | | **Earned Credits** | **Grade** | **Grade Points** |
| **L** | **T** | **PR** | **In Sem** | **End Sem** | **TW** | **PR** | **OR** | **L+ T** | **PR** |
| Machine Learning | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Information & Cyber Security | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Compiler Construction | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Human Comp. Interface | 3 | - | - | 30 | 70 | - | - | - | **100** | **03** | - | 03 | O | 30 |
| Laboratory Practice III | - | - | 4 | - | - | 50 | 50 | - | **100** | **-** | 02 | 02 | O | 20 |
| Laboratory Practice IV | - | - | 4 | - | - | 50 | - | 50 | **100** | **-** | 02 | 02 | O | 20 |
| Project Work Stage II | - | - | 6 | - | - | 100 | - | 50 | **150** | **-** | 06 | 06 | O | 60 |
| **Total** | **12** | **-** | **14** | **120** | **280** | **200** | **50** | **100** | **750** | **12** | **10** | **22** |  | **220** |

Fourth Year SGPA: 10 Grade: O Total Credits Earned: 44

FE SGPA: 9.76 SE SGPA: 9.52 TE SGPA: 9.41 BE SGPA: 10

Total GP/Total Credits: 1837/190 Total CGPA: 9.67 Class: First Class with Distinction

Abbreviations: L – Lectures, PR – Practical, T – Tutorial, OR – Oral, TW – Term Work, DRG - Drawing