



भारतीय प्रौद्योगिकी संस्थान धारवाड
INDIAN INSTITUTE OF TECHNOLOGY DHARWAD
धारवाड / Dharwad, / कर्नाटक / Karnataka 580 011



॥ सा विद्या या विमुक्तये ॥
भारतीय प्रौद्योगिकी संस्थान धारवाड
Indian Institute of Technology Dharwad

Roll Number: 180010027 Academic Unit: Computer Science & Engineering
Name of the Student: RISHIT NILESH SAIYA Joining Month & Year: July 2018
Programme: Bachelor of Technology (B.Tech.)

| Code | Name | Credits | Tag | Grade | Code | Name | Credits | Tag | Grade |
|------|------|---------|-----|-------|------|------|---------|-----|-------|
|------|------|---------|-----|-------|------|------|---------|-----|-------|

Academic Year: 2018 - 2019, Term: Semester Autumn

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|-------------|--|-----|----|----|-------------|----------------------------------|-----|----|----|
| CH 101 | Chemistry for Engineers: Fundamental concepts and Applications | 8.0 | MA | AA | ME 111 | Engineering Graphics Lab | 5.0 | MA | BB |
| CH 111 | Chemistry Lab | 3.0 | MA | AA | ME 113 | Hands on Engineering Lab | 3.0 | MA | AA |
| HS 101 | Introduction to Fine Arts | 1.0 | MA | PP | NO 101 | National Sports Organisation | 0.0 | MA | PP |
| MA 101 | Calculus | 8.0 | MA | AA | PH 101 | Quantum Physics and Applications | 6.0 | MA | AA |
| SPI=9.70/10 | | | | | CPI=9.70/10 | | | | |

Academic Year: 2018 - 2019, Term: Semester Spring

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|-------------|--|-----|----|----|-------------|------------------------------|-----|----|----|
| BB 101 | Essential Biology for Engineers | 7.0 | MA | BB | MA 103 | Differential Equations I | 4.0 | MA | BC |
| CS 101 | Computer Programming | 8.0 | MA | AB | NO 102 | National Sports Organisation | 0.0 | MA | PP |
| EE 101 | Introduction to Electrical Systems and Electronics | 7.0 | MA | AA | PH 102 | Electricity and Magnetism | 6.0 | MA | AA |
| MA 102 | Linear Algebra | 4.0 | MA | AB | PH 111 | Physics Laboratory | 3.0 | MA | AA |
| SPI=9.03/10 | | | | | CPI=9.33/10 | | | | |

Academic Year: 2019 - 2020, Term: Semester Autumn

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|-------------|------------------------------------|-----|----|----|-------------|-------------------|-----|-----|----|
| CS 201 | Data Structures and Algorithms | 6.0 | MA | BC | EE 201 | Data Analysis | 6.0 | MA | AB |
| CS 203 | Discrete Structures | 6.0 | MA | BB | HS 201 | Economics | 6.0 | MA | BB |
| CS 211 | Data Structures and Algorithms Lab | 3.0 | MA | AB | HS 202 | Wellness Software | 2.0 | ALO | AA |
| CS 213 | Software Systems Lab | 8.0 | MA | BB | CPI=8.94/10 | | | | |
| SPI=8.19/10 | | | | | | | | | |

Academic Year: 2019 - 2020, Term: Semester Spring

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|-------------|-----------------------------------|-----|----|----|-------------|------------------------------|-----|----|----|
| CH 301 | Environmental Studies | 6.0 | MA | AA | CS 212 | Computer Networks Laboratory | 3.0 | MA | AB |
| CS 202 | Automata Theory | 8.0 | MA | CC | EE 204 | Digital Systems | 6.0 | MA | BB |
| CS 204 | Computer Networks | 6.0 | MA | AB | EE 214 | Digital Circuits Lab | 3.0 | MA | AA |
| CS 205 | Design and Analysis of Algorithms | 6.0 | MA | BC | CPI=8.73/10 | | | | |
| SPI=8.13/10 | | | | | | | | | |

Academic Year: 2020 - 2021, Term: Semester Autumn

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|-------------|------------------------------------|-----|----|----|-------------|---|-----|----|----|
| CS 301 | Computer Architecture | 6.0 | MA | AB | CS 313 | Data Bases and Information Systems Laboratory | 3.0 | MA | AA |
| CS 303 | Data Bases and Information Systems | 6.0 | MA | BB | EE 405 | Pattern Recognition and Machine Learning | 9.0 | MA | BB |
| CS 309 | Research and Development Project | 6.0 | MA | BC | HS 301 | Philosophy | 6.0 | MA | AA |
| CS 311 | Computer Architecture Lab | 3.0 | MA | AA | CPI=8.71/10 | | | | |
| SPI=8.62/10 | | | | | | | | | |

Academic Year: 2020 - 2021, Term: Semester Spring

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|-------------|------------------------------|-----|----|----|-------------|--------------------------------|-----|----|----|
| CS 302 | Artificial Intelligence | 6.0 | MA | AB | CS 316 | Compilers Laboratory | 3.0 | MA | AA |
| CS 304 | Operating Systems | 6.0 | MA | AB | CS 406 | Compilers | 6.0 | MA | AB |
| CS 312 | Artificial Intelligence Lab | 3.0 | MA | AA | HS 402 | Technological Entrepreneurship | 6.0 | MA | AB |
| CS 314 | Operating Systems Laboratory | 3.0 | MA | AA | CPI=8.79/10 | | | | |
| SPI=9.27/10 | | | | | | | | | |

Academic Year: 2021 - 2022, Term: Semester Autumn

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|-------------|-------------------------|-----|----|----|-------------|----------------------------|-----|----|----|
| CH 405 | Our Health and Medicine | 6.0 | MA | AP | CS 433 | Cloud Software Development | 3.0 | MA | AB |
| CS 405 | B.Tech Project-CSE | 6.0 | MA | AA | HS 403 | Happiness and Well-being | 6.0 | MA | AA |
| SPI=9.86/10 | | | | | CPI=8.89/10 | | | | |

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Name of the Student: RISHIT NILESH SAIYA

Roll Number : 180010027

| Code | Name | Credits | Tag | Grade | Code | Name | Credits | Tag | Grade |
|---|------------------------|---------|-----|-------|-------------|-------------------------|---------|-----|-------|
| Academic Year: 2021 - 2022, Term: Semester Spring | | | | | | | | | |
| CH 303 | Bioenergy and Biofuels | 6.0 | MA | AP | CS 409 | B.Tech Project CSE - II | 6.0 | MA | AA |
| SPI=10.00/10 | | | | | CPI=8.94/10 | | | | |

| | | | |
|--|---|-------------|-----------|
| Mandatory Course Credits (MA) | = 251.0 | Overall CPI | = 8.94/10 |
| Additional Learning Opportunities course Credits (ALO) | = 2.0(No of 1 credit ALO courses=0, No of 2 credit ALO courses=1, No of 3 credit ALO courses=0) | | |
| Overall Credits Completed | = 253.0 | | |
| Overall Grade Points | = 2253.0 | | |

Final Result

The student has completed the academic requirements of the programme in the month of June 2022 for the award of Bachelor of Technology in Computer Science & Engineering

Signature & Seal of Transcript Issuing Authority:

January 28/06/2022

Assistant Registrar (Academics), IIT Dharwad
Date: 28 June 2022
Place: Dharwad
Near High Court, P. B. Road
Dharwad-580011, Karnataka

General Information

The medium of instruction at the Institute is English.

Course credits and grade: Each course is associated with credits which are an indicator of its relative weight in calculating the academic performance. A two-letter grade is awarded to students on the basis of their performance in examinations and assignments of a specific course. The letter grades have numerical equivalents on a 0-10 scale as given below.

| Letter Grade | AP | AA | AB | BB | BC | CC | CD | DD | FR | W | DX | PP | NP | AU |
|----------------------|----|----|----|----|----|----|----|----|----|---|----|----|----|----|
| Numerical Equivalent | 10 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 0 | - | - | - | - | - |

FR: Fail and repeat, W: Withdrawn, DX: Insufficient attendance, AU: Satisfactory performance in an audit course, PP: Pass, NP: Not Pass. The minimum passing grade in a course is DD. The grade AP is awarded to students with exceptional performance in core courses of a programme. Numerical equivalents of letter grades are referred to as grade points.

The numerical grade points are not convertible into marks or percentages.

Performance Indicators: The performance of a student in a semester is given by a number called the Semester Performance Index (SPI), which is the weighted average of the earned grade points in the courses during the semester.

If a student has courses with credits C_1, C_2, \dots, C_n , with grade points of G_1, G_2, \dots, G_n respectively, then

$$\text{Semester Credits} = C_1 + C_2 + \dots + C_n$$

$$\text{Semester Grade Points} = C_1G_1 + C_2G_2 + \dots + C_nG_n$$

$$\text{SPI} = \text{Semester Grade Points} \div \text{Semester Credits}$$

Cumulative Performance Index (CPI) is the weighted average of the grade points in the courses in all semesters. The indices SPI and CPI are calculated upto two decimal places.

Courses are tagged as MA: Mandatory (Core/Elective), MI: Minor, HO: Honours, ALO: Additional Learning Opportunities, AU: Audit

- Each degree programme has mandatory credits consisting of core courses, elective courses, and non credit courses. These courses are tagged as MA.
- For calculation of SPI and CPI, grades obtained in mandatory courses (MA) and in additional learning opportunities (ALO) are considered. Provided these ALO courses followed regular grading system followed for mandatory courses.
- Students can supplement the learning experience by crediting additional courses. Credits earned in these courses, when appropriate, can earn additional credentials either in the form of "Honours" (HO) in the chosen discipline or "Minor" (MI) in another discipline or both.
- "Honours" is not indicative of proficiency, and can be earned by completing the additional prescribed set of advanced core and elective courses in the chosen discipline. "Minor" can be earned by completing the prescribed set of courses in a discipline other than the chosen discipline. Additional courses that are not used for earning "Honours" or "Minor" are tagged as "Additional Learning Opportunities" (ALO).
- The AU is awarded based on satisfactory attendance and fulfilling the minimum requirements as set by the course instructor. It carries no grade points and does not figure in SPI or CPI calculations.
- PP or NP is awarded in some mandatory and additional learning opportunities credit courses that are not earmarked with a letter grade. Correspondingly, PP/NP does not carry a grade point.

The Institute does not award any class or division. Notionally, the CPI may be multiplied by a factor of 10 to obtain a numerical percentage.

END OF TRANSCRIPT

Roll Number: 180010027