



**NEW HORIZON
COLLEGE OF ENGINEERING**

Autonomous College, Affiliated to VTU | Approved by AICTE New Delhi & UGC
Accredited by NAAC with 'A' Grade & Accredited by NBA



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Alumni feedback: 2014 – 2018 Batch

- The alumni replied that there is relevance of Curriculum in profession along with this they emphasized on application base teaching
- Alumni members found entire infrastructure very encouraging in learning process.
- To organize Motivational talks on Stress management, Conflict handling, Team work, Team building and Study skills on research and developments, Patenting, Entrepreneurship and Management are organized for students to strengthen their ideas and provide initiative paths.
- To make internship mandatory for a period of 6 weeks for 6th sem students.
- Encourage students to do projects in the software industry to get the flavor of industry environment.
- At least two modules in each course to be taught by industry experts.
- Use of audio-visual aids, practice of MCQs from online exam point of view, providing question banks, practical approach of teaching, frequent interactions with students and placement coaching and assistance.

Employee feedback: 2014 – 2018 Batch

- Career based tracks for technical creativity and analytical thinking skills are to be provided to students to solve various software related issues.
- Choice of electives can be incorporated in the curriculum based on emerging technologies. Labs associated with these electives can enrich technical knowledge of the students.

- Encourage the students to participate in various Hackathon, Project exhibitions, Technical contests and other academic related events and the same can be considered during assessment.
- The industry readiness with innovative software programs and application development are required, hence students must specialize in multiple programming languages like C, C++, C#, java, python etc.
- Domain specific industrial visits help students to create curiosity and exposure for industry readiness.
- Exposure to open source tools
- Active participation in technical events and expose the student ability to industry experts.
- Seminars/ workshops on “How to prepare for placements, coding tips, debugging skills, technical concepts on programming” can be organised for students for smart performance.
- Latest/essential programming languages can be incorporated and better choice of programming languages for subjects like AI, Data, Machine Learning etc...

Student Feedback: 2014 – 2018 Batch

- After receiving feedback from students, various expert talks can be provided insights on the recent advancements like Block-Chain, Machine learning, Database, etc. to gain more knowledge about the trending technologies
- To expose their practical and technical knowledge, student projects can be sent to Git-hubs
- As per the recommendations of the students, guest talk on entrepreneur can be conducted.
- To participate actively and exhibit their talents, many technical events/ Hackathons can be organized.
- Students requested to schedule industrial visits with various companies to know the advanced research and developments, core programming techniques, and practical working environments to meet the industrial needs
- To broaden the students' thinking level, self-study report preparation, seminars on the topics beyond the syllabus can be encouraged.

Course Coordinators Feedback: 2014 – 2018 Batch

To enhance the curriculum and edify knowledge of the students on current modern prerequisites, the course coordinators proposed to fuse the gaps identified in the syllabus endorsed for the third, fourth, fifth, and sixth semester

- To promote the excellence and currency of the curriculum to uplift the technical skills and potential of students to find innovative ways to solve problems and to achieve success, the course coordinators suggested top-ups for the curriculum to boost the employability and equip the students to meet workplace challenges. In this regard Course coordinators proposed changes in the syllabus endorsed for the third, fourth, fifth, and sixth semester.
- The syllabus of the data structures with C can be refined as per the student placement's basic requirement.
- Trending technologies-based courses are included in the curriculum, thereby OOPS with C++ and replaced with OOPS with Java.
- The new edition of textbooks can be introduced to the students as suggested by the BoS members to absorb more knowledge.
- Data analytics can be included as a professional elective to understand the technological advancements in the last couple of years that transformed the process of usage of data
- Self-study and technical reports can be incorporated into the syllabus
- Courses like essential English, life skills for engineers, introduction to economics can be introduced for students in the syllabus.
- Suggested to include Secure Software Engineering apart from software engineering
- Utilization of portals like Coursera and Edx for MOOCs are recommended by the BoS members
- Suggested to revise core Java Programming and removal of obsolete concepts and Fundamentals of Data science course
- Suggested for the working process of Virtualization
- Recommended to include Cloud Computing certifications
- Discussions on the course coverage of Big Data Analytics with HP vertica were happened.

Action plan 2019-2020 based on 2018-2019 Feedback summary:

Based on the Alumni feedback

- Introduce compulsory 6 week internship at reputed government agencies like DRDO, LRDE or in reputed IT companies like IBM, SAP, HCL etc for 6th sem students.
- To involve alumni in the extension activities of the college/Department.
- Involve industry experts as one of the guide for final year projects.
- Use modern teaching aids to improve teaching learning process.
- Identify industry experts as guest faculty to teach at least two modules from selected courses.
- Encourage students at UG level to write and publish papers in national/international conferences/journals
- To organize adequate placement and training sessions to improve placements.

Action plan 2019-2020 based on 2018-2019 Feedback summary:

Based on the Employee feedback

- The industry readiness with innovative software programs and application development skills are incorporated among students. Hence students are specialized in multiple programming languages like C, C++, C#, java, python etc.
- Choices of electives are incorporated in the curriculum based on emerging technologies. Electives offered for students are VMware, Big Data Analytics, HP Vertica, Cisco Networking Academy, Schneider Electric, SAP next-Gen, Quest Global Engineer, and Automation Anywhere (IIoT). Labs associated with these electives enrich technical knowledge of the students.
- Students have the choice to program in any programming language. No restrictions enforced on students.
- Students learn subjects like Computer organization, Operating systems, Mobile application development, python, data Science, Machine Learning at their initial semesters to strengthen their technical skills.

- Active participation in technical events and expose the student ability to industry experts. Many activities like Hackathons, KSTA project proposals, Toycathon idea submissions, External Competitions, QuBytes 20 - State Level Inter collegiate Tech Fest are structured for students to participate and stimulate their learning.
- In all courses, the fifth chapter – 20% of syllabus every semester is handled by Industry experts. All labs have minimum 3 experiments beyond syllabus to incorporate more curiosity and hands-on with the subject.
- Students will have very good exposure to open source tools.

Action Plan for 2019-20 based on 2018-19 feedback summary

Based on Student feedback

- Various expert talks have been held to provide insights on recent advancements like Block-Chain, Machine learning, Databases Management, Data Structures, and Applications. Technology Trends, and Industry in Future, object-oriented programming, etc. to gain more knowledge about the trending technologies
- Student projects were sent to Git-hubs to expose their practical and technical knowledge.
- Students have participated in various technical symposiums like National level SAP Semicolon Hackathon, on alumni recommendation
- Scheduled the industrial visits with various companies like Mindtree, IBM, Wipro, Cerner, SAP and many more to know the advanced research and developments, core programming techniques, and practical working environments to meet the industrial needs
- Seminars on the self-study report were scheduled to develop a good work ethic and broaden the thinking level of the students.

Action Plan 2019-20 based on 2018-19 feedback summary

Based on Course Coordinator Feedback

- Motivational talks on Stress management, Conflict handling, Team work, Team building and Study skills on research and developments, Patenting, Entrepreneurship and Management are organized for students to strengthen their ideas and provide initiative paths.
- Workshops on trending technologies and technical jobs for the next 5 years according to industry requirements are delivered to students to downstream their career paths
- The reference books of latest edition as text books are included in the syllabus.
- Computer organization and operating systems are included in third and fourth semesters respectively to provide the fundamental knowledge regarding the architectures and related components.
- Course contents of subjects like data structures with C, object oriented programming, machine learning, advanced java, design and analysis of algorithms, software engineering and project management are revised for contents and reframed.
- Appropriate mathematical/statistical concepts are included in the syllabus for Machine Learning.
- Courses like mobile application development, NoSQL, Internet of Things, UNIX system programming, automata theory and formal languages, file structures, User interface design, virtual reality, soft computing are included as new courses in the curriculum.
- Mini project component and technical seminar components are incorporated in the syllabus.
- Mandatory to all the students to undergo at least 6 week of internship in their curriculum. Many final year projects are done in government agencies like DRDO, LRDE, HAL etc or in reputed IT companies like IBM, SAP, HCL etc.

The following open electives were included in 7th semester

- ✓ Big Data Analytics with HP Vertica-I
- ✓ Big Data Analytics with HP Vertica-II
- ✓ Data Analytics
- ✓ Block chain

- ✓ VMWare Virtualization Essentials
- ✓ Adobe Experience Manager
- ✓ SAP
- ✓ CISCO Routing and Switching