FEEDBACK OF CURRICULUM FROM ALUMNI

41 responses

Name of the Alumnus

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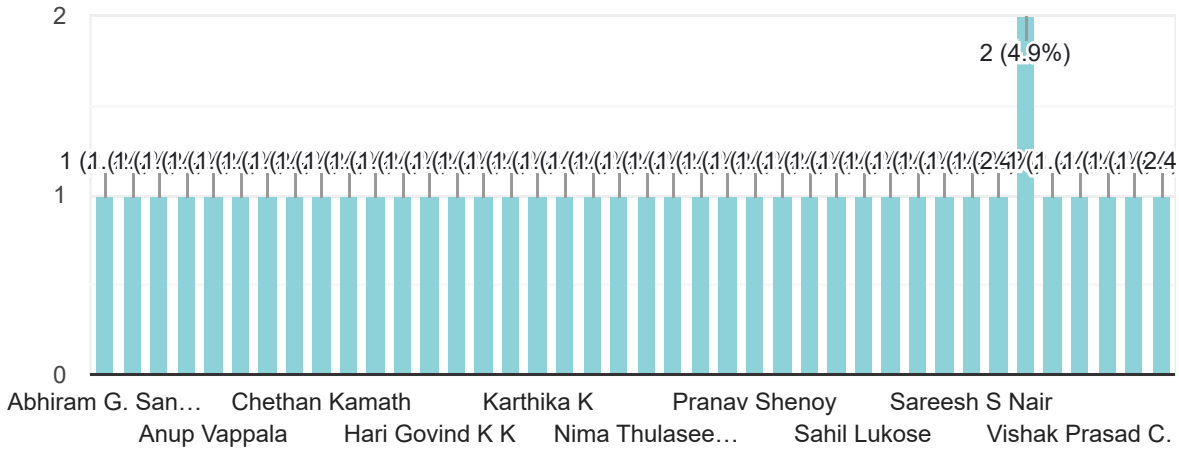

Designation

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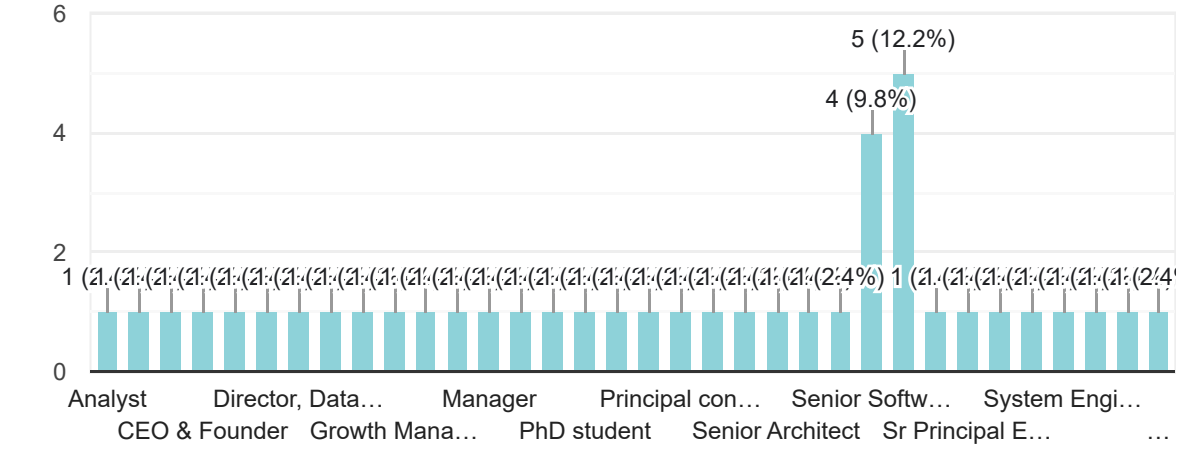

Name of the Organization/ Institution

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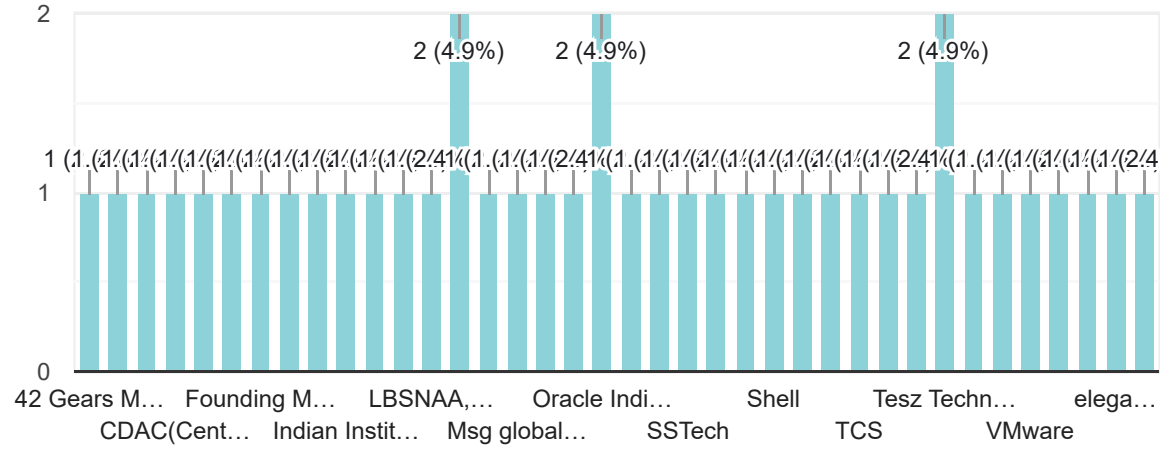

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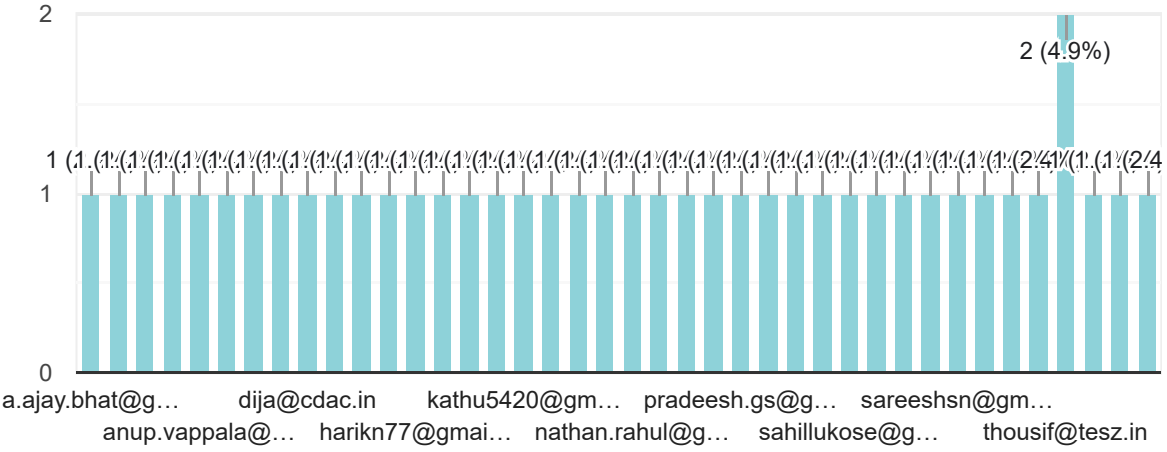

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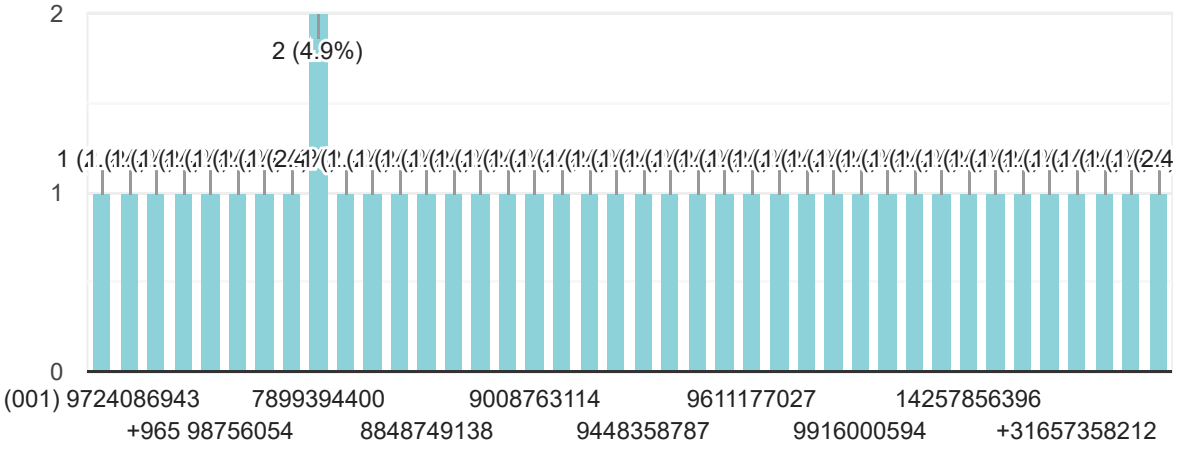

Adequacy of curriculum to provide application-oriented knowledge.

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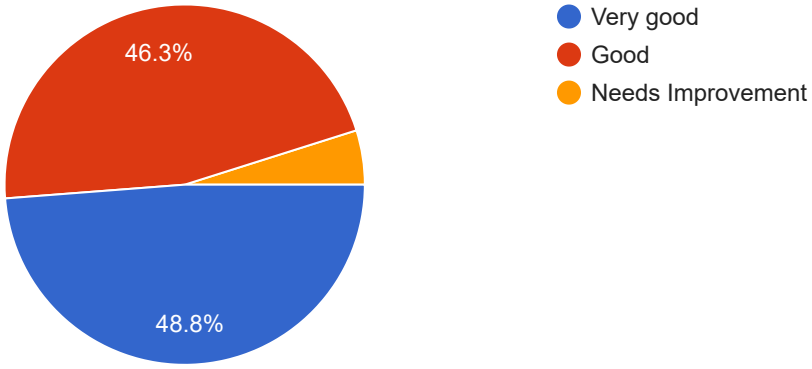

Versatility of courses in the curriculum that help students to develop a profession.

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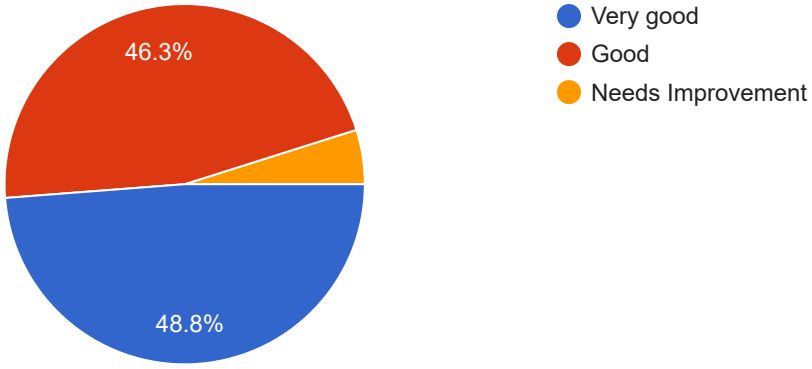

Structuring and selection of courses in the curriculum to achieve programme outcomes.

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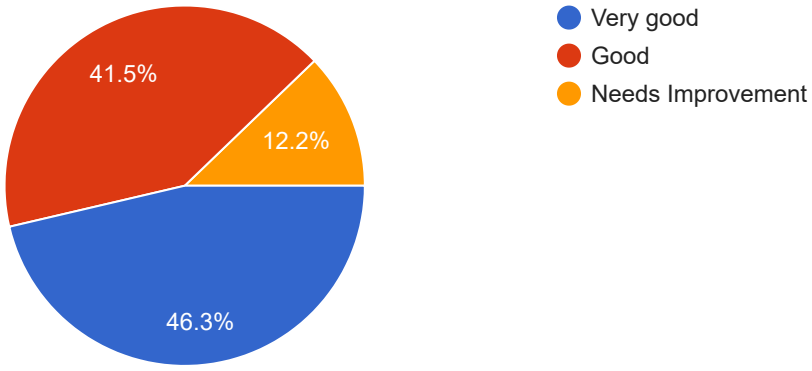

Capability of curriculum to orient the students towards higher education

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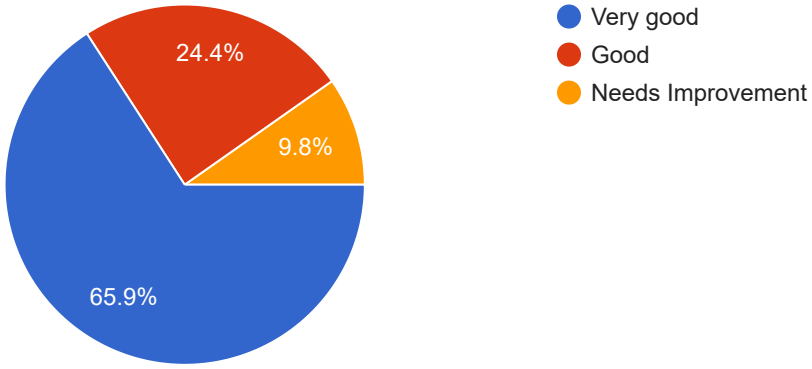

Adequacy of courses in curriculum that enhances employability.

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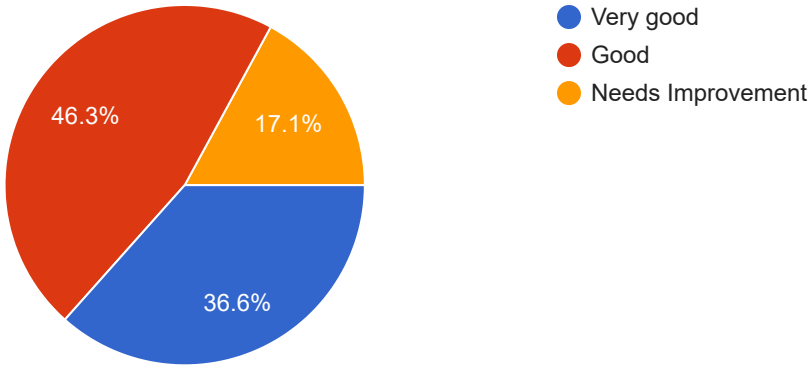

Availability of courses in the curriculum to enable the student to apply knowledge in real life applications.

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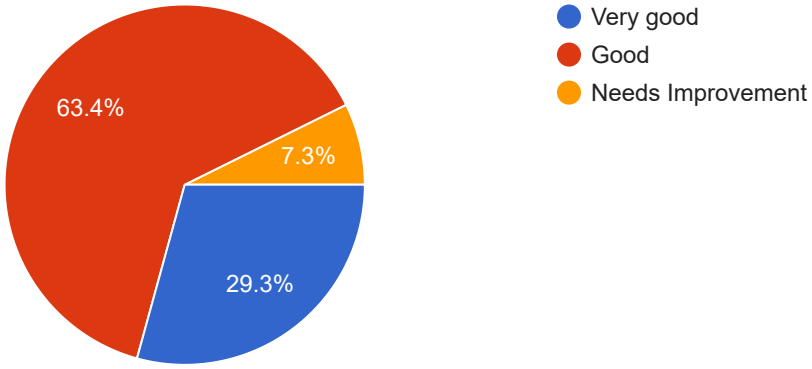

Capability of courses in the curriculum to encourage entrepreneurship.

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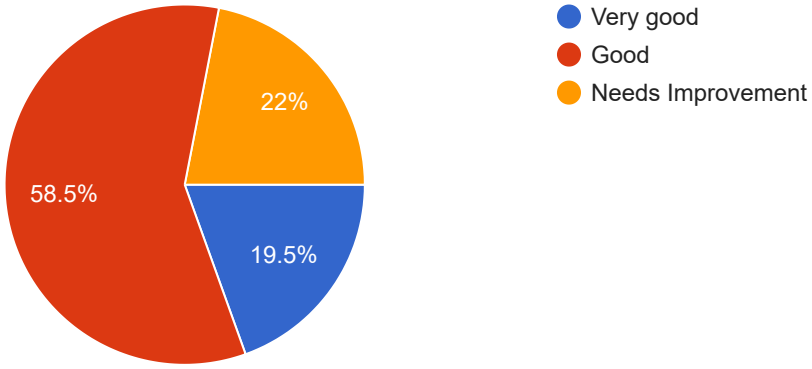

Availability of courses in the curriculum to motivate the students for research and development.

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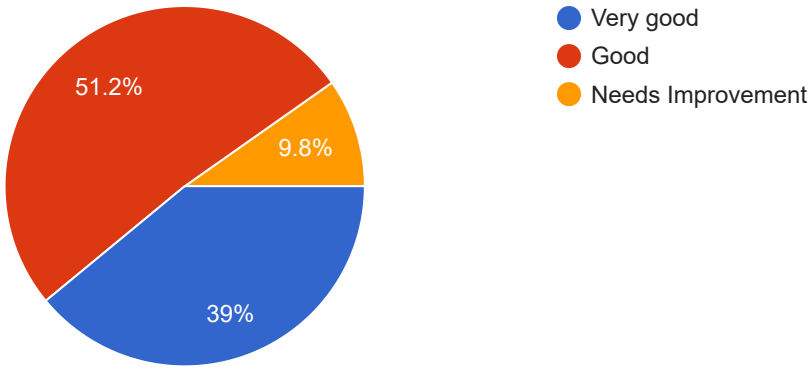

Extent of the curriculum to make students industry ready.

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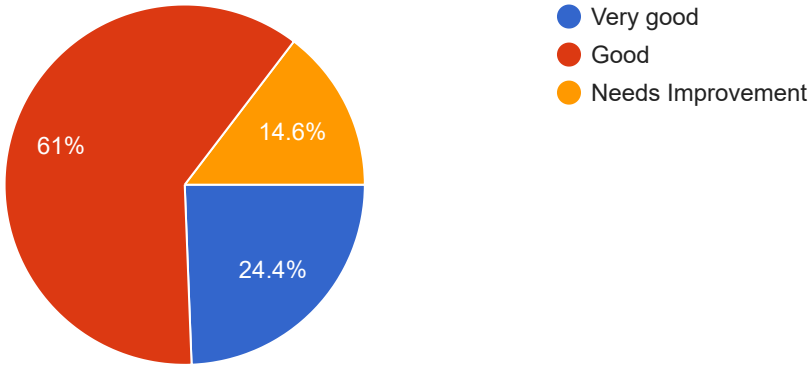

Adequacy of hands on experience given to the students through the Curriculum

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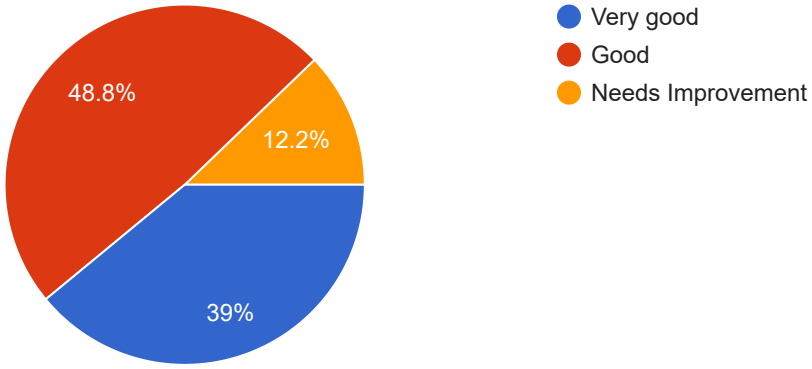

Capability of curriculum to enable the students to sensitize towards societal and environmental issues and foster values.

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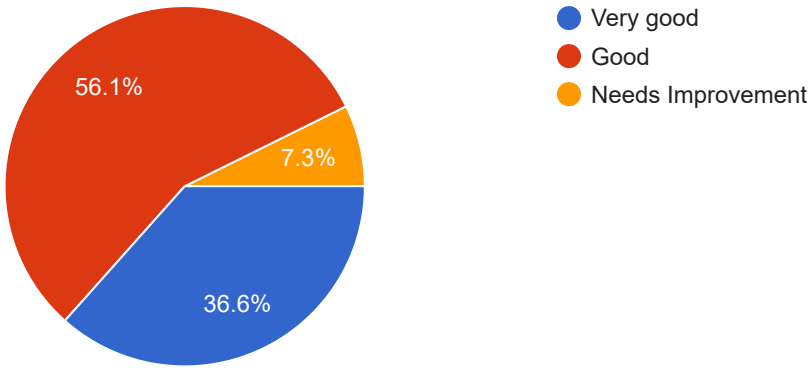
41 responses



Academic flexibility provided by curriculum to students through pathways/electives from own area/specialization as well as from other areas.

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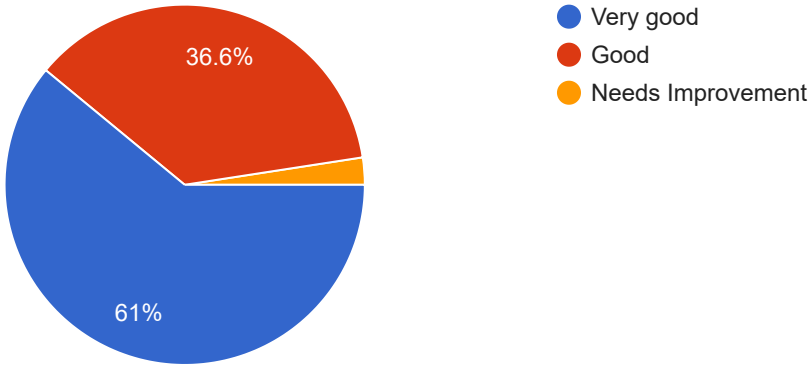

Potential of curriculum to support and enhance self learning capability of students

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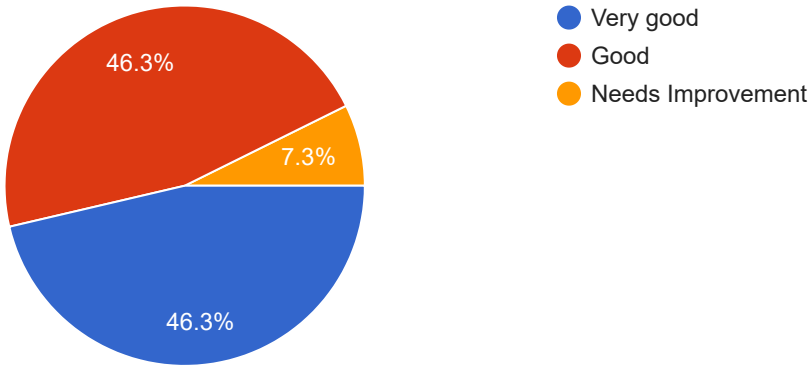

Capability of the curriculum to cover corporate aspects

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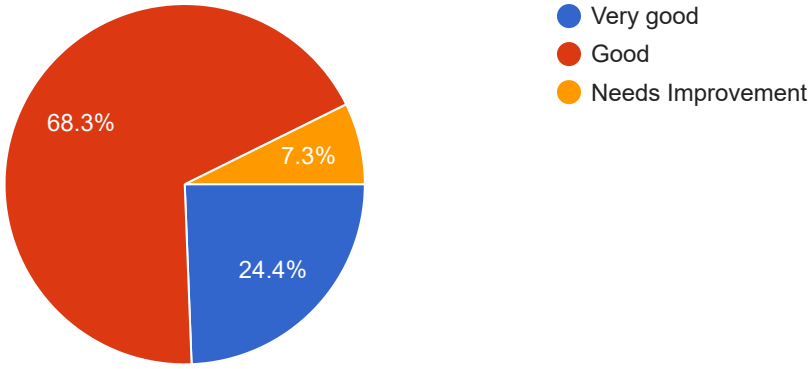

List the courses to be included in the curriculum

41 responses

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Inclusion of Agile methodology in Software engineering, Functional programming and verification course is highly valuable for higher studies.

1. One course focusing on scientific computing, numerical methods etc. See https://web.stanford.edu/class/cs137/syllabus.html for an example. It is possible that some part of it, such as SVDs will be covered by some basic ML course, but having a dedicated scientific computing course is helpful.
2. A systems programming course - Linkers, loaders, programming language design etc.
3. Designing scalable systems. Having a course that tackles that is the biggest help the students could get for a career in the industry (https://mse.s3d.cmu.edu/0_documents/syllabi/sp2022/17647-a4-data-intensive-scalable-systems.pdf).

Java, Python, Embedded system labs

- [ ] Building Websites
- [ ] It is important for a computer science graduate to know how to develop a website and host it. I am not sure how many knows it now.
- [ ] No Code /Low Code platform - They should be comfortable in using low code/no code platforms like Webflow, Bubble, Caard etc.
- [ ] The point is that if they have an idea of something in future, they can code their own website without depending on others.
- [ ] Exposure to Businesses
- [ ] Entrepreneurship is not only about building a unicorn business or raising funding. Students should have exposure to various businesses which are run by a single person and generate millions in revenue. https://www.youtube.com/watch?v=6p3K9bUS7cU
- [ ] Students should be asked to generate at least 1$ online before passing out. Even if a student is able to make $500 - $1000 every month as a side business, it will keep them in a better position than getting an employment. Young guys makes 1000s of dollar every month from simple screenshot software.
- [ ] Marketing Tech Products
- [ ] "Build in Public" is the new type of marketing used by tech guys around the world. There are 100s of people like https://twitter.com/levelsio on Twitter. Students will get an idea about how to market, sell and build product as people share all the info online as part of "Build in Public"

NA

gpu computing- pretty much the whole of AI and crypto fields use this as infrastructure. Practicals on GPU compute, disctributed computing, machine learning.
Cloud computing practicals.

AI, Machine Learning and Python

I feel that students should be able to generate 1$ online before they graduate. For this, students should get exposure to different types of businesses.There are thousands of solo businesses which generates tens of thousands of revenue. When they get exposed to it, they will get new ideas and develop their own products which will get them their first dollar and eventually millions in revenue. Even if they are able to generate just $500 in monthly revenue from their products, it will keep them in a better footing when they graduate. So, exposure to these kind of businesses and tech people are important.

Here is a snapshot of the details that I have submitted in the form.

- Building Websites
- It is important for a computer science graduate to know how to develop a website and host it. I am not sure how many know it now.
- No Code /Low Code platform - Students should be comfortable in using low code/no code platforms like Webflow, Bubble, Carrd etc.
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I am happy to share more information with respect to this.

Nil

Basic Electronics, Computer Hardware and Assembling

1. Personal Finance: This course would teach students the basics of financial management, including budgeting, saving, investing, credit cards and debt management.

2. Public Speaking: Effective communication is a critical skill in many professions. A course in public speaking would help students develop their confidence and ability to speak in front of an audience.

3. Critical Thinking: A course in critical thinking would teach students how to analyze and evaluate information effectively, helping them make informed decisions and solve problems more effectively.

Cloud (could be AWS/Azure/GCP) concepts + how the cloud enables innovation.

Civil engineering basics, Electronics (Basics and Advance) , Machine Learning, AI, Business Communication

I would prefer if the curriculum had more lab and practical papers instead of projects and seminars alone. Both hardware and software labs are required.. Java programming, data structures, basic electronics, microprocessor, os labs, networks, db, sql, compiler design labs need to be included every semester

Basically for every theory paper it would be nice if we could include a practical paper as well so that the students understand thoroughly what they learn in theory

Flexibility on non departmental electives

-

Industry oriented subjects

Statistical data analysis, Data modelling and feature engineering

Courses regarding clean coding practices and writing structured efficient code rather than just normal coding

Industry intensive software development: Industry intensive software development curriculum should includes the importance of writing clean and readable code, the significance of logging, when to use and not to use multi-threading, async programming, unit testing, and integration testing, different architectures, deployment with Docker Kubernetes environment, setting CICD environment with Github-Jenkins-Kube, cloud app deployment, debugging local/cloud environments, implementing Agile methodology in class, and practicing Scrum on a daily basis by dividing classes into groups and Scrum Masters. Instead of a single project at the end of the curriculum, create a Github repository for groups/individuals and implement an incremental approach from demo a working app to MVP to product. Along with that, use Jira (free for small teams) or open-source project management to track the estimate with actual time against tasks creation.

ML application development : ML application development courses should include using ChatGPT API, Incremental ML models, best practices of ML apps and deployment, Bench-marking models, data cleaning, web scraping, making apps that produce outputs that can be used for ML later on, when not to use ML, and ML ethics.

Distributed Systems(as PCC)

Theory Courses (Applied Algorithms, Geometric Algorithms, Approximation Algorithms, Randomized Algorithms, Graph Theory)

n/a

web development/FrontEnd programming

Product design and management, UX + Accessibility,

Project Management and Agile Methodologies

New curriculum looks good.

Basics of project management and tracking, Introduction to Cloud, Basics of Large scale system design

Economics, Social Issues - for breadth wise learning

Artificial Intelligence, Soft Computing

- A course on Law (court procedures, citizen's rights..., not sure if this will be covered in "Const. of India" course)
- Advanced Operating Systems & Advanced Database Systems (deep diving into the actual implementation of both). Students interested in specializing in Systems software might find it interesting.

- Distributed Systems: Most job roles are looking for this skill.

Labs and practice for newer technology electives like ML, AI Data analytics

Principles of programming languages (PPL), Experience Design, Formal verification, A course to familiarize with today's tech (Web3.0, Microservices, Kubernetes, Dapps etc), To be included in some courses (Like Intro to software engineering) or course of its own for patterns,antipatterns , clean-code concepts etc

Distributed version control - GIT , Functional Programming, NoSQL & TSDB, CI and CD , build and deployment pipeline, HTTP Security and Pen testing, Task & Stress Management skill, Agile software development,

Modern software engineering and project management courses must be added(Agile methodologies, scrum, CI/CD etc.). Cloud Computing should be a compulsory course, if possible a lab as well, with hands on teaching-learning. Ideally free and open source software along with version control should be taught in labs alongside programming. It would be great if Database fundamentals were taught in an earlier semester than being taught this late into the degree since it is vital for many projects and would be a significant help for students if they are equipped with basic database querying knowledge before hand.

Building a data science model - elective or project

Mooc courses should be made compulsory .here it's given as option in semester 8 with elective subjects.

1. Understanding the ethical implications of technology and how it can impact society.
2. Understanding of how technology can be used to address environmental issues and promote sustainability.

Cloud Computing, Blockchain, Deep Learning

C programming language and LAB, especially use it for data structure LAB. Theory paper followed by LAB in ODD/EVEN semesters.

List the courses to be removed from the curriculum

41 responses

NA

Biology

Nil

..

Engg Physics, Engg Chemistry, Biology, Manufacturing practices

I haven't seen the detailed syllabus, but CST426 appears to be of marginal value. Also CST445 is too basic for a seventh semester CS student in my opinion.

I saw Biology in the course list. I hope it is a typo.

None. However, I may suggest Biology unless there is something to do with Computational Biology but this would be an advanced topic.

client server architecture

Discrete Structures

I saw Biology in the list. I hope it is not part of the curriculum

None

Constitution of India, environmental sciences, sports and yoga, biology, chemistry are not really required

Professional Ethics, reduced version better

-

Subjects that are not much relevant for core CS

Microprocessor and other embedded system architecture should be an elective from my perspective

Nothing

none

Quantum computing

Constitution Of India, Biology

n/a

Engineering graphics, Engg Chemistry

-

New curriculum looks good.

Chemistry, Sports & Yoga, Biology

Biology (can be made an elective)

Can reduce the number of HSMC courses

Environmental Science (learning since 5th grade. I don't think student's will benefit apart from getting good score.)
Can Constitution of India can be expanded? Like include Law and all the rights as mentioned above. Const. of India is taught in school in detail. One thing missing is the Law.

Possibly compiler design has very limited use in the real world unless in research

BIOLOGY, Finance and Accounting (or lower the credits)

Manufacturing Practices
Engineering Graphics
Discrete Mathematics
Theory of Computation

Constitution of India seems like an unnecessary inclusion in a professional degree.

Graphics,mechanics,basic Electrical

NIL

Biology not very useful as an engineering subject.

State about overall organization of the curriculum

41 responses

Good

Very good

..

The structure needs to be rearranged so that students know the basic concepts before learning the dependent courses.
For example Microprocessor and controllers subject shall be taught after giving the knowledge about Computer organisation and architecture so that generic knowledge about the computer architecture is known by the student before learning the specifications.

The curriculum does a good job covering the hot topics in CS right now. It would be good to cover some of the basic topics with equal rigor.

Better focus on in hand skills improvement, exposure to entrepreneurship and real life applications

Curriculum looks good.

Very Good

Very good and complete.
Inductrial collaboration, hands-on/practical for advacned electives/courses can be improved.

Excellent

Well-organized and fruitful curriculum. The students are learning not only engineering subjects but also social values, humanity, and many other aspects. This will encourage the students to focus well on their future. They will get multiple options to look at and build their career. Entrepreneurship, startups, higher studies, and core job options are clear in the curriculum. Even in higher studies and research, they will get clarity on new and developing technologies like AI, IoT, Image processing, Cyber Security, Data Science, etc. This will help the students find their interests and specialize in their future. Since teenage students are the strength and future of a developing nation like India, environmental science, the Indian constitution, sports, finance, etc., are very much necessary for a student. We need not only engineering employees but also engineering employers, researchers, and scientists. Startups, entrepreneurship, and social impact projects/real-life implementation of their studies and projects will empower that. Technical English, writing skills, speaking, and group activities are much-needed subjects to be included in a professional course. This will sharpen their skills, and they can confidently approach their career and society. It is important to be a good social being and have humanity. Profession and technical education come later. This curriculum will help to build good

youngsters with social values and responsibilities along with engineering in the profession. All the best.

The curriculum appears to be well-rounded and designed to equip students with both technical and non-technical skills. The variety of courses offered, including both theoretical and practical components, suggests a comprehensive approach to learning. Additionally, the inclusion of opportunities for hands-on experience and collaboration with industry professionals could provide valuable real-world learning experiences. Overall, the curriculum seems to be structured to promote the development of both technical knowledge and interpersonal skills necessary for success in the field.

Overall organization is good, especially for grasping the key concepts.

NA

Overall it seems fine..

Good diversity of courses, can make it flexible for students.

I found the overall structure quite good

.

Satisfactory

Curriculum is good but an introduction on clean coding and good coding practices might equip students to better prepare themselves for industry

Looks Good

Good exposure through mandatory internships.

The overall curriculum looks good

Seems well organised, needs some balancing in curriculum here and there.

The curriculum has a good breadth covering a lot of topics.

The overall curriculum is organised in a structured manner. The professional ethics course in the 3rd semester can be offered at a later stage. The entrepreneurship course offered in the 6th semester can be offered at a earlier stage to help the students develop an early interest in entrepreneurship.

It's really great curriculum when compared with the old ones.

Very much in tune with the real world. Students should be encouraged to explore the subjects beyond the curriculum as well.

Overall good but seems a bit overwhelming for students as they might not find some courses added for breadth reasonable and interesting.

No comments

There seems to be a good balance between core subjects and extra-degree courses. In a better system it would be ideal to have these non-CS courses as electives or for extra credit. Would also be great if students were allowed to choose a lot of their classes. Treat the core courses as compulsory and let students what else they want to learn so that can concentrate and converge on their interests. This would no doubt encourage students to look into what they like, pursue research, PhDs and higher studies instead of just trying to go for placements and land a job.

Well-built, preparing students for both: corporate interaction and in-depth technical responsibilities.

Can include more industrial exposure.

A positive attempt being made to ensure that curriculum responds to needs of the age, and the near future. However areas such as ethical implications, eco-consciousness and flagship government tech initiatives may be covered too.

Need to be refined time to time based on the recommendations from expert committee

Good.

Suggestions if any:

24 responses

Please make sure at least 2-3 electives are available every time.

- [ ] We need the students to get more exposure to tech guys building cool products and generating handsome revenue.

Overall the list looks good to me. I would recommend some tools knowledge for computer graphics, content/image and Azure/AWS SaaS or PaaS

Inductrial collaboration, hands-on/practical for advacned electives/courses can be improved.

As a suggestion, the familiarization and assembling of computer hardware should be included in the curriculum. A computer engineer should know both computer hardware and software. A computer never starts without proper hardware and connection. After this process only the concept of software comes. Hence my suggestion is to include this as a hands-on/lab.

Since there is a core subject, 'IoT and embedded systems' in the sixth semester, it would be better to give an introduction to basic electronics. In semester I, basic electrical engineering is included. It would be good to get some basics about electronics before the core subject.

And I believe basic cryptography is included in the subject: Cyber Security.

There is however opportunity to update the curriculum to something that is more relevant today - Cloud, AI (cognitive services, machine learning models, Large Language Models like OpenAI/ChatGPT, etc). Most of the students graduating in 4 years will be in the cloud - so it is necessary to prepare them for it.

NA

Please feel free to reach out.. I can help whenever I have time

Ma'am, I had looked at the new curriculum. Here is my feedback,
1. Good to see that courses related to financial education, entrepreneurship, technical writing are being introduced.
2. Instead of fixing biology as extra non-departmental subject in 3rd semester, can it be made flexible. Intent is to have students choose their interest second to the CSE, where they feel it can be combine for future ambitions, directions.
3. Happy to see that courses now have a project component for hands - on. According to Student's interest in academia or industry, some effort can be utilised to introduce a research component or a industry grade end to end product/solution at smaller scope respectively. At the end of such projects, a retrospection of such a project can be evolved into main project/ paper/ social project by figuring out its usage in real life problems.
4. Some courses like entrepreneurship can't be solely prioritized on conceptual knowledge, even though it's important. Focus can be on how to push or direct their new ideas/ existing completed projects from previous semester into a product with societal or business value. Another point of focus should be inviting actual founders or people from startup space using

tkm alumni network to provide high value guidance when design an idea or product to fruition. This can be sort of a bi weekly offline/online talk as part of a series of talks throughout the course.

Theory of Computation is a fundamental course, which should ideally be taught much earlier than sixth semester (third semester, maybe).

Students should have the opportunity to collaborate with different industrial and other university groups to create their projects

The curriculum seems to be heavily leaning towards Data Science part and less focused on Theoretical Computer Science.

Hope the assignments will be done in a meaningful way and plagiarism should be checked

Possibility to incorporate continuous evaluations based on practical experience.

- An elective course on Project Management and Agile Methodologies may be introduced. Check this course for an idea of the contents: https://www.coursera.org/learn/project-management-foundations/
- In 3rd semester, I suggest reducing professional ethics to 2 credits and increasing Microprocessor credits to 3, as well as changing respective number of hours
Following electives at first glance seem too similar and may have overlap in contents, so need to ensure that students dont take similar electives together:
- Software Testing, Software Maintanence
- Building Cloud and Big Data Application, Cloud Systems Engineering
- Statistical Thinking for Data Science, Big Data Analytics, Web Technologies for Advanced Data Visualization
- Computer Vision, Pattern Recognition & Visual Recognition

The electives are good and it helps students to focus based on their interest. It would be great if we help them (provide orientation) to choose the right elective based on their skill set.

Non Profit organisations in the development sector find it difficult to adopt technological solutions that can help increase the scale of social impact. Further, very few firms (like Tech4Good) offer customised solutions to solve the challenges. There is a huge potential to optimise social impact using effective data management and innovative tech. A short course related to ICT4D can be useful to increase awareness among students and address the gap.

It would be good to have more opportunities for students to interact with alumni to encourage a better understanding of what is available in the real world. It also would be good to offer some electives as certifications. Entering the workforce with certifications would be very beneficial to the students. Encouraging students to take on professional certifications with help from the teachers would be very good especially in cloud computing, cryptography, Data science etc.

[SEM 2]
Universal Human Values II (UHV II) - I am not sure of the details but I think this should be integrated in multiple semesters but in smaller portions
preferably without credits. These should be continuous rather than a one-time thing and

preferably 0 credits

[SEM 3]
Biology for an entire semester might be overkill for computer science and engineering students. IMO, to broaden the breadth of
knowledge it would be better to incorporate relevant topics from Biology along with other subjects like with neural networks, computer vision,
etc. So that there is a better understanding of the subject and its applications and students may have a natural curiosity to learn more about it.

Professional Ethics - I believe should be mandatory and must have x% attendance but 3 credits seems a bit high. ie, Professional Ethics (theory) to have the same credits as Discrete Mathematics theory does seem to be out of proportion

[SEM 4]

[SEM 5]
Finance and accounting is important to know but for an entire semester and having the same credit as computer networks looks wrong.
IMO,
computer networks is a very important subject and probably done in multiple courses over multiple semesters.

Software Engineering should be given more importance. I didn't value the subject when I was in college but now I understand that it is the most important subject one should be aware of.
Mathematics should be more practical. Advanced Queueing models is a gem of a subject.
I really don't see the value of 'Theory of Computation' as a mandatory subject. I think it should be an elective. Engineering graphics & Chemistry for 2 semesters is bit too much I think. I love the fact that there is more importance to Humanities and Entrepreneurship.

Overall structure of the curriculum looks fine in most areas but should not remain unchanged and go stale over the years. It should be updated every year if possible. Run multiple course pulse surveys throughout the semester to find out what is going right and what isn't so that problems can be tackled immediately and positives can be reinforced.

Discrete maths and maths III in semester 3 can be distributed to different semesters. System software can be included in any one semester.Artificial intelligence subject can be included.

1.Universal Human Values II (UHV II) - to be contextualized to needs of societal expectations from technology and its ethical implications.
2.Environmental Sciences - to be chosen in terms of todays needs of climate change mitigation/adaptation and disaster risk reduction are areas where computer science engineers can contribute to.
3.Constitution of India - focus has to be on the values that the Preamble, Parts III, IV & IV-A contain.
4. Introduction to technical aspects of flagship initiatives of the Government in IT/Tech sector - India Stack, Digital India, Aadhar, CERT-In, Indian Cybercrime Coordination Centre (I4C) Scheme, NCOG-GIS, Unified Payment Interface (UPI), Unified Mobile Application for New-age Governance (UMANG) etc.

Having common subjects for all branches for the first and second semester is a point to be re-thinked thoroughly by considering the positives and negatives.

FEEDBACK FROM ACADEMICIANS

11 responses

Name of the Expert

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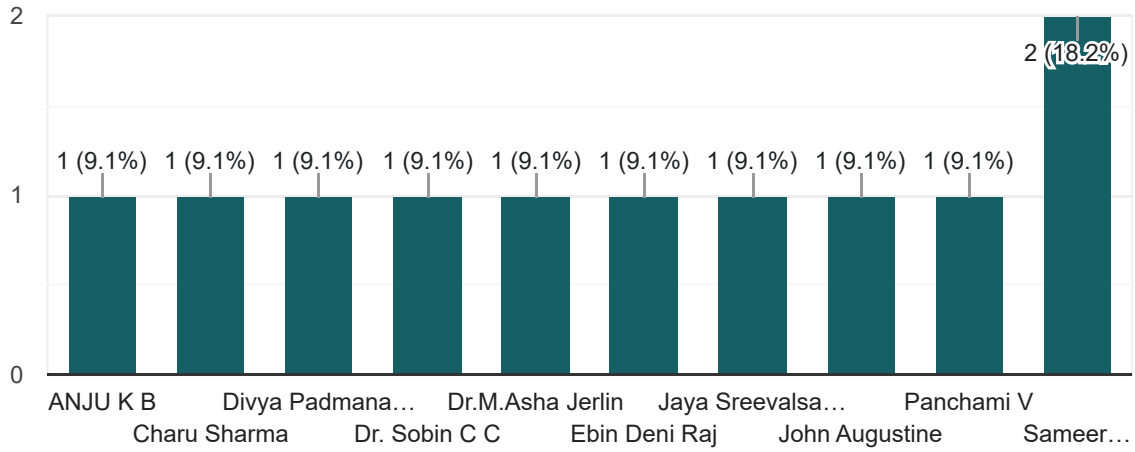

Designation

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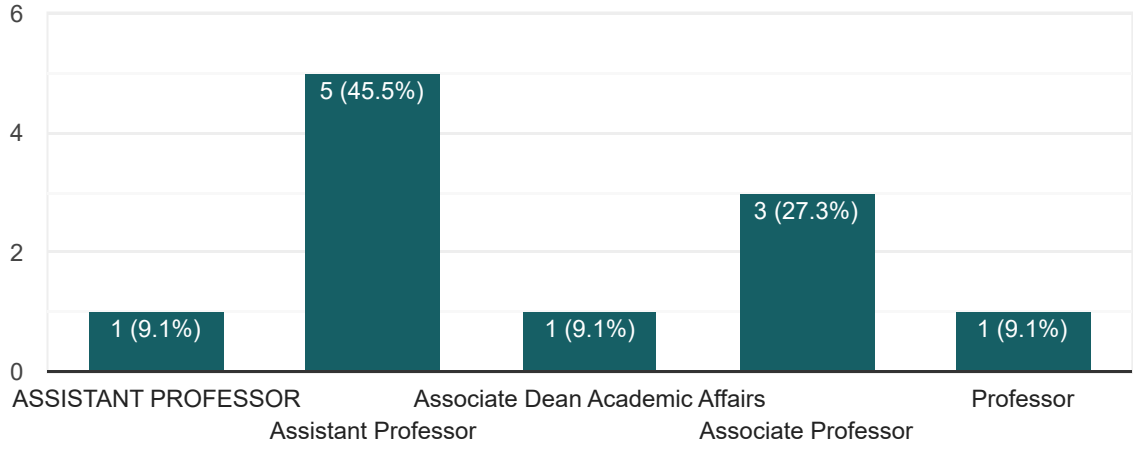

Name of the Organization/Institution

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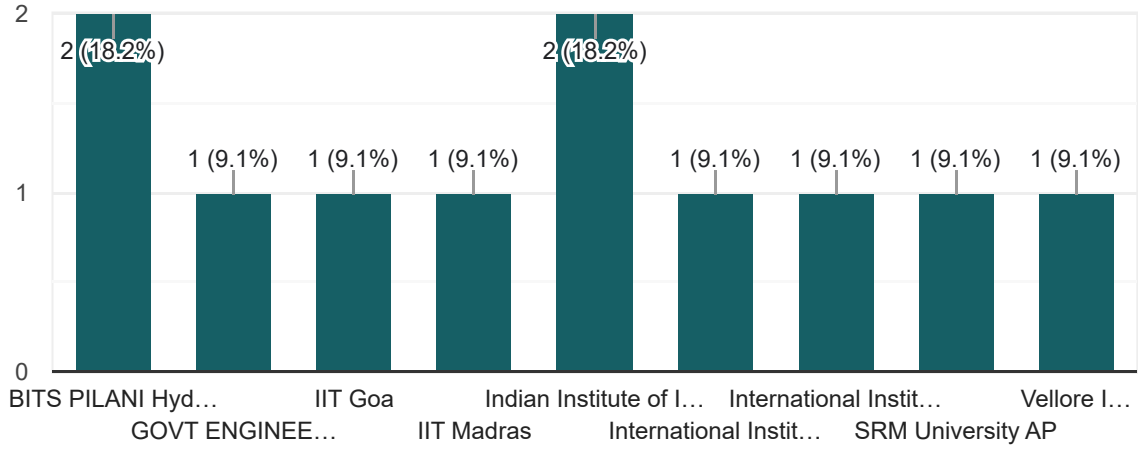

Email

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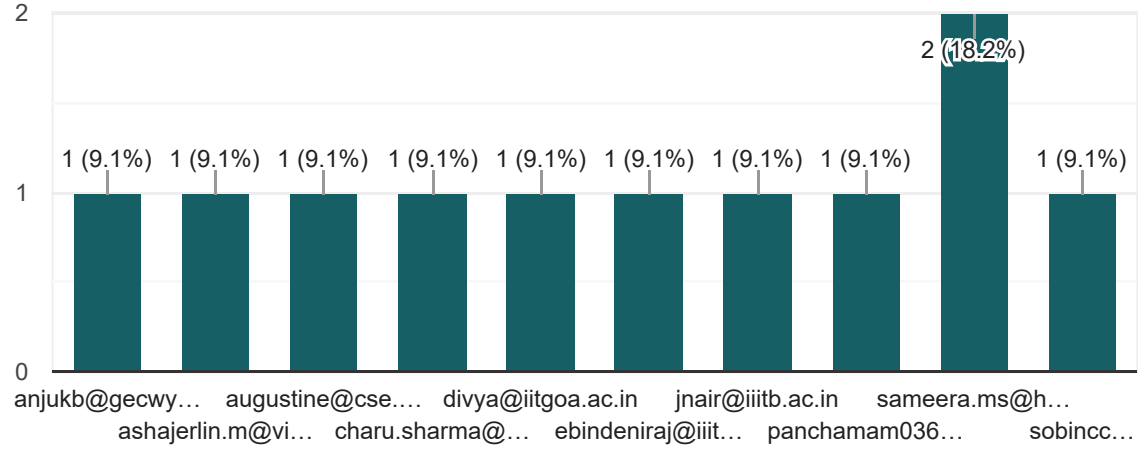

Mobile

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9980128942

8939677726

9611288336

Address

11 responses

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Dept. of Computer Science and Engg.
IIT Madras

IIT Goa

Relevance of the courses to the program

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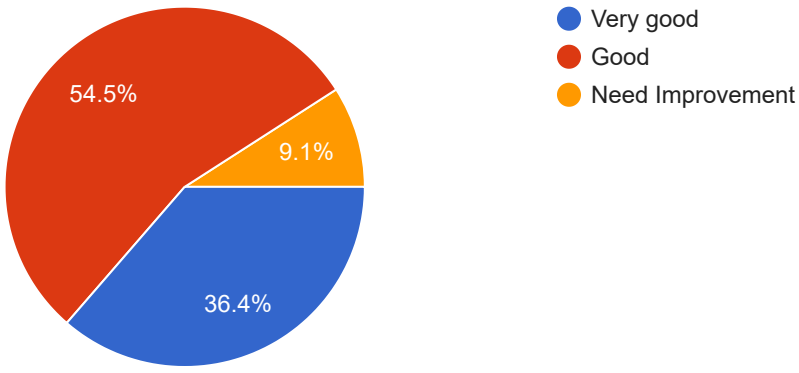

Appropriateness of courses in curriculum to obtain the programme outcomes.

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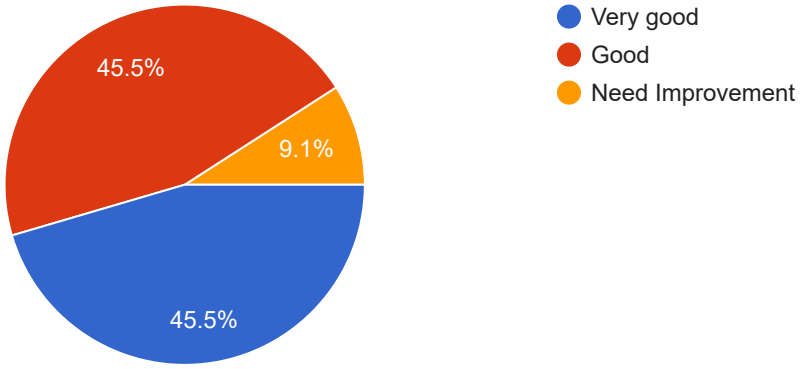

Potential of curriculum to develop independent thinking.

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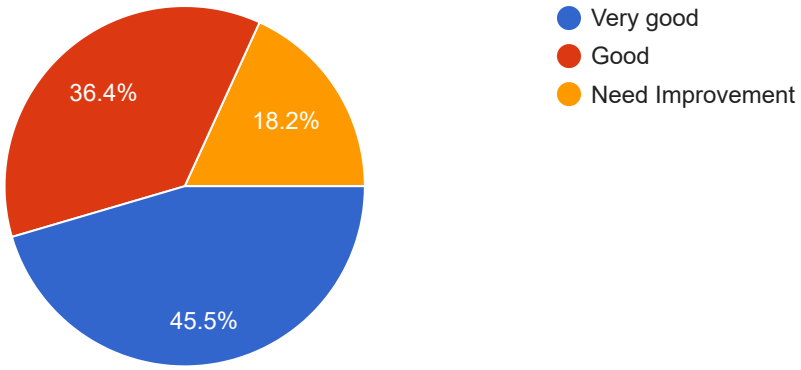

Competency of the courses in curriculum to enhance the knowledge in the programme domain.

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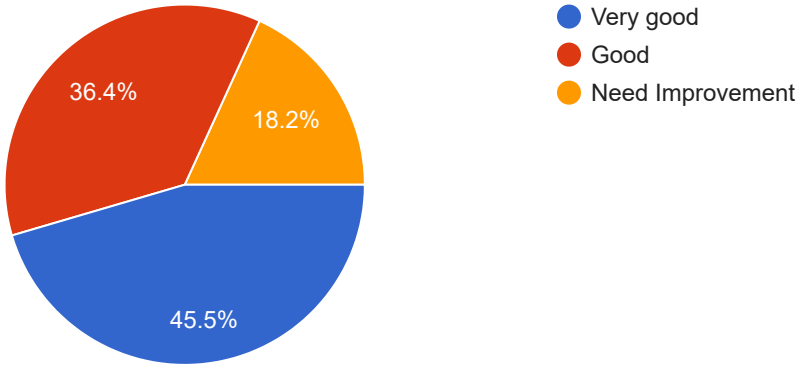

Choice of courses in curriculum to enable the students to apply their knowledge in real life.

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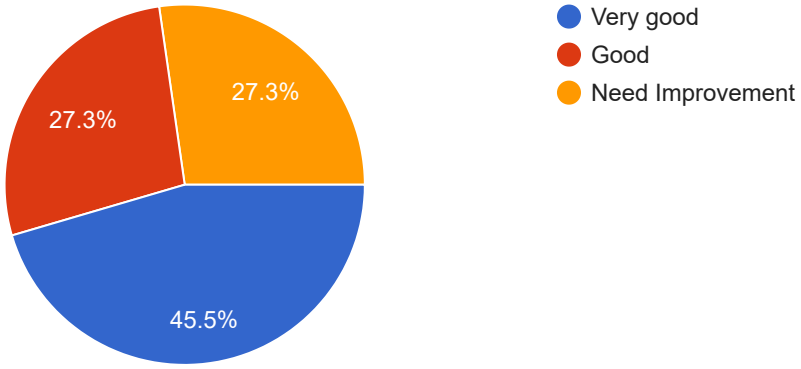

Consideration of courses that demand the teachers for research inclusive teaching

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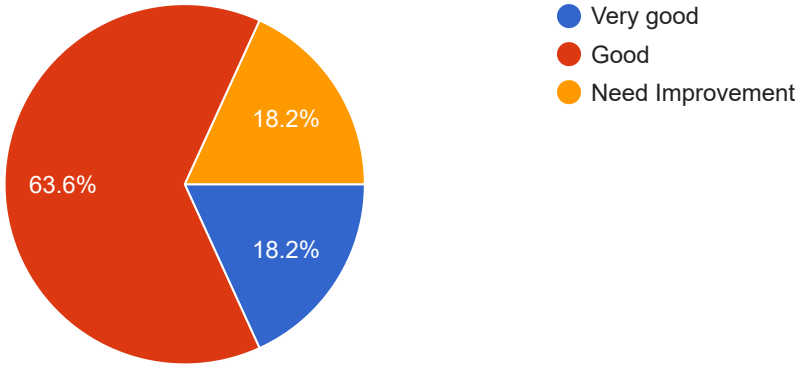

Appropriateness and distribution of courses in the curriculum across the semesters.

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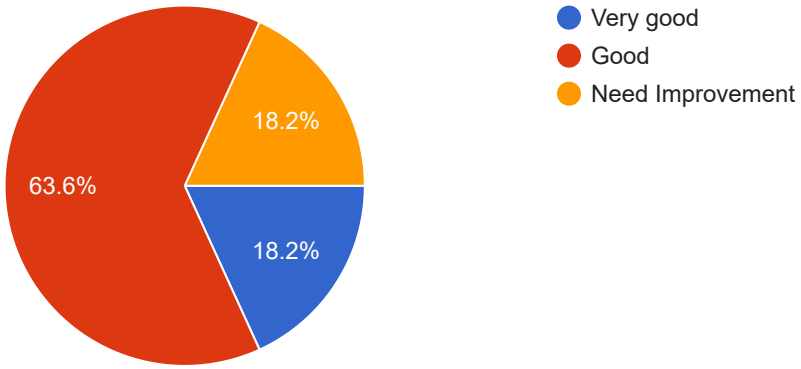

Coverage of various domains of the programme through curriculum.

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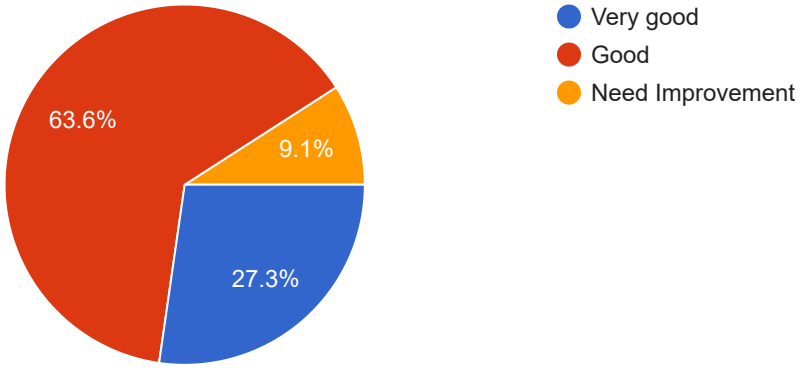

Updation of curriculum with the current trends in Industry and Academia to facilitate placements.

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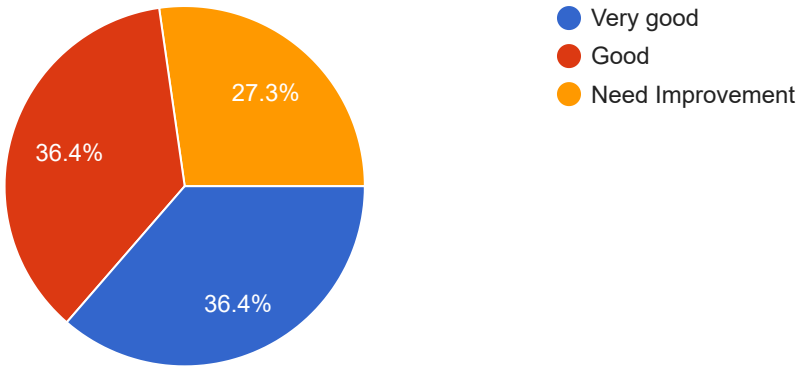

Relevance of Curriculum for the competitive examinations like GATE, GPAT, GMAT etc.

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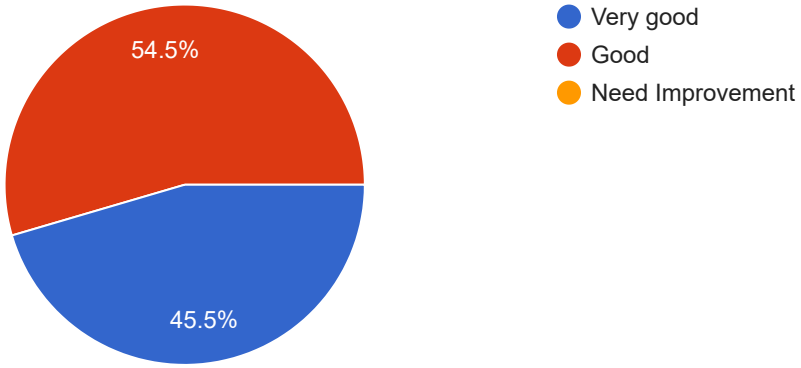

Adequacy of lecture hour allocation to each course in the curriculum.

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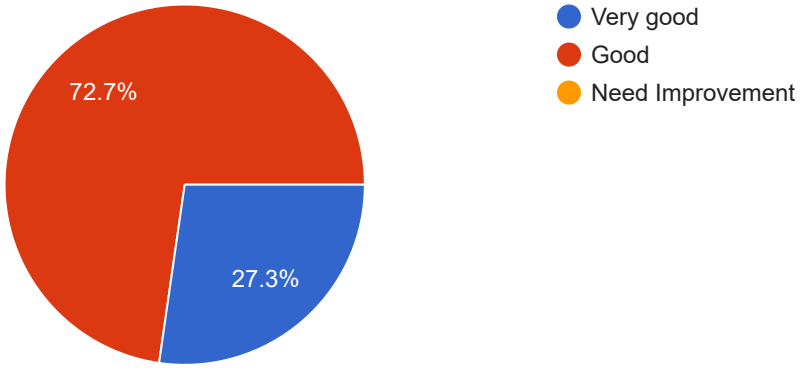

Availability of courses in the proposed curriculum to help the students to inculcate ethical and human values.

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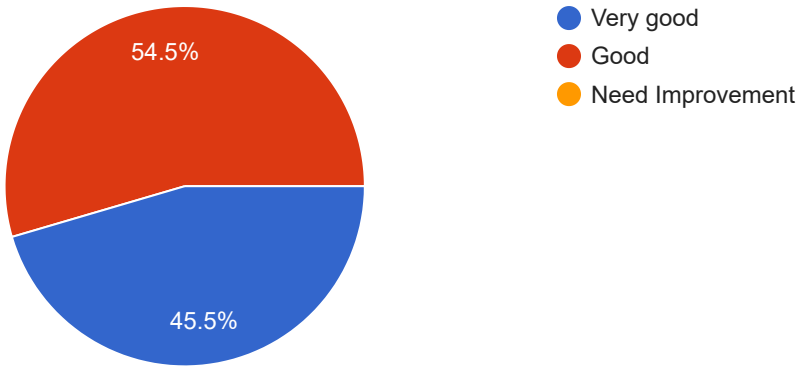

Adaptability of curriculum to cop up with the pace of the changing world.

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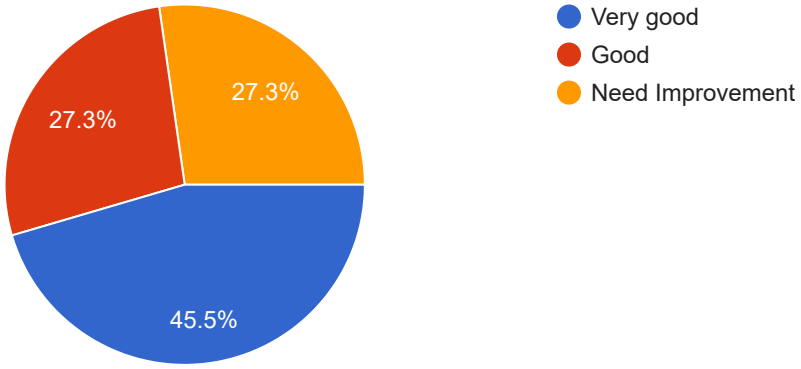

Capability of curriculum to orient the students towards higher education.

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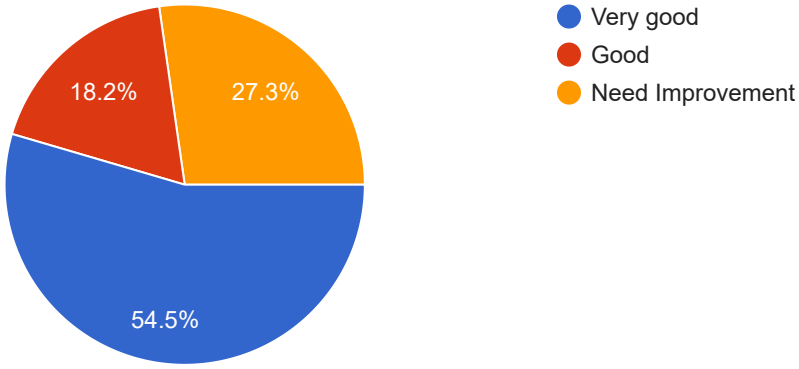

Extent of curriculum in improving employability and placements

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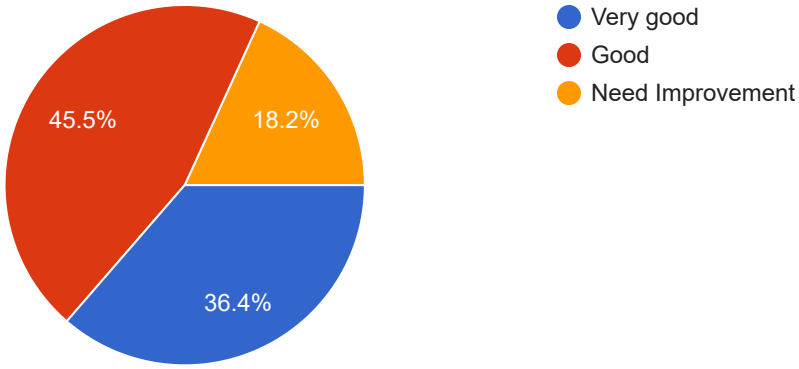

Adequacy of proportion of lab courses in the curriculum

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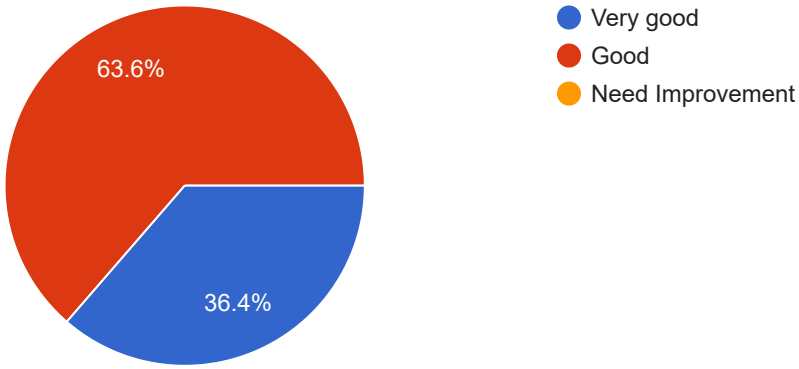

List the courses to be included in the curriculum

11 responses

Basics Of Electronics Engineering, Artificial Intelligence.

More elective courses should be offered in the Institute in different areas, such as computer vision, NLP, etc.

NIL

Optimization Techniques, Machine learning, AI, IoT, Soft computing, Drone Technology, Robotics, Malware,SDN

Computational Biology, Artificial Intelligence

Advanced courses in Machine learning, responsible AI etc.

You have covered all important areas.

Regarding Cyber Security Advanced Technologies should be included like Quantum Computing and Security, Quantum Cryptography, IoT Security, Blockchain Technology and Cryptocurrency. Moreover syllabus cover only defence side it should cover offensive side as well like penetration testing, Malware Analysis etc.

N/A

I suggest an AI & ML course instead of just ML. This will allow students to get the larger picture.

One dedicated course each on Probability Statistics, Linear Algebra, Calculus, (and if possible Optimization) to be done before Machine Learning course. A course on traditional AI methods (similar to CS 188 at Berkeley) can be included.

List the courses to be removed from the curriculum

11 responses

NA

Finance and Accounting

NIL

Computer Graphics, Microprocessor

Environmental Studies

I feel that the non CSE courses in Sem I and Sem II are not required for the CSE domain. More CSE courses could be included if those subjects are eliminated.

Environmental studies

N/A

None

Constitution of India, Finance and Accounting

State about overall organization of the curriculum

11 responses

Good

Very Good

The proposed curriculum looks fine as almost all the important courses, projects, etc., are covered there. I have a couple of points to mention.
1. Research projects should be included from 3rd year onwards; otherwise, students have only one year to work on them. Including it in 3rd year would improve research capabilities which would eventually help students in placements and higher studies.
2. Some advanced courses, such as image processing and machine learning, should have research projects as part of the evaluation in the course. This would make the specialized courses research-oriented.
3. More elective courses should be offered in the Institute in different areas, such as computer vision, NLP, etc.

Overall Good.

NA

Overall organization of the curriculum looks good for me. It covered most of the important areas in the field of computer science and subjects which increase human values are also included.

Overall organization of the curriculum is good.

It is a good curriculum altogether. All the changes made in the current curriculum with respect to internship, additional courses on entrepreneurship, etc., are good ones.

The overall structure is very good. Theory of computation and compiler design are pushed a bit later than I expected, but I think this is good for most students. It is perhaps better to build this theoretical basis after some exposure to computing.

Mostly alright. Theory of Computation should be moved to earlier semester. Students should be aware of concept of hardness by the time they do machine learning.

Suggestions if any

9 responses

The curriculum is well-designed enough to help pupils grow and attain their objectives. The following is a list of my suggestions.
1. As the final module of java almost certainly includes database connectivity, it is much preferable if database is taught before java (advanced programming). Students will be able to understand things readily as a result of that.
2. As IOT is covered in the sixth semester, it could be better to include a course on the principles of electronics in the curriculum before IOT is taught.
3. If the prerequisite subjects were taught first, it might be favorable for the students.For example Operating systems require COA, and Microprocessors require Digital Electronics and Logic, this curriculum places both of these in the same semester.
4. Just having two hours for microprocessors and microcontrollers may not be enough to finish the course on time (According to the old KTU syllabus).
5. It could be preferable to include a course that will enable students to perform well on competitive tests like GATE. (Like comprehensive course work in KTU syllabus).
6. To avoid a break in the programming subjects, it could be preferable to add a programming subject in the third semester as well.
7. Computer science is expanding quickly and the people associated with this branch should update as well.It could be preferable to add a course that addresses the updates in computer science and it must be adaptable to the changes.

New courses can be introduced

If you are planning to include Artificial Intelligence as a part of machine learning then the course name can be Artificial Intelligence and Machine learning. It is better to have practical sessions for Microprocessors and Micro controllers. Subjects like Finance and accounting helps students to get good placement opportunities. But I am wondering whether this subject may lead to reduction in CGPA for some students (since it is a compulsory subject).

Please consider eliminating ENGINEERING PHYSICS
ENGINEERING CHEMISTRY
ENGINEERING MECHANICS etc.. in first semester and try to include some good CSE courses from Semester I itself.

Even though courses like Finance and accounting and Biology will increase the placement opportunities, it is better to keep those courses as elective courses. It is better to make Environment studies as an elective course.

NA

Semester I - Engineering Graphics is given 4 credits, different from AICTE one (3 credits).
Semester V - Machine Learning may be moved earlier than 5th semester, given its importance for industry/placement.
Semester VI - Theory of Computation is a fundamental course for CSE. It would be good to have it earlier.

I am a little surprised by the number of PCC lecture hours -- just two per week. I will personally find it very difficult to cover key ideas in these PCCs within just 2 hours per week. However, the credits add up as per AICTE norms, so perhaps, there is good reason for it.

Some electives can be included on Natural Language Processing, Reinforcement Learning (if not already present).