

AGENDA

Third (3rd) Meeting of SENATE of

Indraprastha Institute of Information Technology, Delhi

Date :	9 th June 2009
<u>Day :</u>	Tuesday
<u>Time :</u>	<u>3.00 PM</u>
<u>Venue :</u>	Conference Room 3 rd Floor, Library

Conference Room 3rd Floor, Library Bldg NSIT Campus Dwarka, Sector - 3 New Delhi

THIRD (3RD) MEETING OF SENATE OF IIIT-DELHI

AGENDA

- 1. Opening remarks
- 2. Tabling of minutes of the previous meeting, which were confirmed through circulation (*Annexure 1*)
- 3. Report on PhD admission and tabling of the list of accepted candidates (*Annexure 2*)
- 4. Foundation courses brief description attached; if anyone wants a detailed description (which gives week wise breakup), please let me know. (*Annexure 3*)
- 5. Student governance framework note attached (*Annexure 4*)
- 6. Plans for preventing ragging note attached (*Annexure 5*)
- 7. Issue: "Should we allow students to repeat courses for grade improvement"?
- 6. Any other matter

Minutes of the Emergency meeting of the Senate held on April 28, 2009, starting at 4pm to discuss the case of Ishaan Maurya (roll No: 2008027), Shashank (roll no: 2008048), and Pranshu Raghuvansh (roll no: 2008038)

Present in the meeting: P. Jalote (Chairman, Senate), V. Bansal, A. Kiehn, M. Vatsa, R. Singh, V. Goyal, K. Saini (member disciplinary/academic dishonesty committee, special invitee), S. Arora (student member), S. Maitra (student member), Dr AR. Subramanian (Registrar)

Present through Teleconference: K.K. Biswas (IIT Delhi), R. Moona (IIT Kanpur), K. Karlapalem (IIIT Hyderabad), C Anantaram (TCS), Pawan Goyal (Adobe), Saugat Sen (Cadence)

The senate discussed the case, facts of which were circulated earlier. (Besides the agenda note, the copies of the statements by the students, and a summary prepared by the faculty and students who were hearing the students for two days, were sent to the senate members). First the background note was summarized and clarifications provided.

The senate members from other academic institutions were asked as to what is the history of similar incidents in their institute. Members from IIT Delhi, IIT Kanpur, and IIIT Hyderabad clearly mentioned that they have not heard about anything even close to this happening in their institutes in the near past (IIT Delhi member mentioned that he has heard of something like this happening many years ago for the JEE exam).

Then the senate was apprised of the outcome of the meeting of the disciplinary/academic dishonesty committee. The senate was told that the committee felt that there were many offenses involved in these acts (entering the institute premises by giving false identity/making fake entry in the gate register in a false name, illegally entering a faculty members cabin from the AC window during night on 23rd night, illegally taking out a copy of the exam paper, tampering with the academic records, and tampering with the electronic records in the laptop.) each one of acts many times severe than an "ordinary academic dishonesty violation" for which policies are generally made. The committee also felt that while the three students may have played different roles, some involving more serious acts than others, all three were clearly party to the whole planned effort, and being a party to this act in itself is a very serious violation of academic conduct of students at the institute. Hence, the committee felt that just for the acts of academic dishonesty (though there are disciplinary violations as well as violations of the law of the land), punishment should be strict, one that is at least equivalent to multiple ordinary offenses. The resolution of the committee was also communicated to the senate, namely that the committee recommends that the three students be expelled from the program/Institute immediately, but keeping in view their long term career, they be given an option to withdraw immediately, within one hour of the 'expel' decision conveyed to the said students.

The senate then heard the statements from two students – Shashank and Pranshu. (Though Mr. Ishaan had given a written withdrawal earlier, he was also invited to present his case, but he chose not to come) Shashank and Pranshu have also submitted their written statements (from which they seem to be reading to the senate), copies of which were taken on record. Clarifications were sought from them by members.

After deliberations, the Senate was of the unanimous opinion that the offenses committed were grave and many, and each one of them much bigger and severe than the normal offenses students sometimes commit. The senate also felt that there is no need to rank the severity of the offenses of the three students, as the students clearly planned and executed the act together with different students playing different but active roles in a group, and that the whole act unacceptable for an academic institution. The senate agreed that all students involved in the act deserve the strictest punishment. In light of these discussions and observations the senate *unanimously* agreed on the following:

The three students (Ishaan, Shashank, and Pranshu) executed a planned and organized effort to illegally access the question paper, which is an offense of extreme proportion in an academic institute. (As was observed by representatives from IITK, IITD, and IIIT H, they have not heard of such a daring offense in last many years in their institutes). All the three played an active role to successfully execute their plan. Hence the senate decided that all the above mentioned students be expelled from the Program/Institute with immediate effect. However, the senate feels that keeping in view their future career, they may be given an opportunity to withdraw from the Program/Institute within one hour, failing which the expulsion order may be issued.

Brief Description of the Foundation Courses

----- SEM I -----

Credits: 4;

Pre-requisites: None (no programming experience)

Post Condition (on student capability after successfully completing the course):

• Ability to develop a 100+ line program in the chosen programming language to solve a given problem.

Brief Description.

This course teaches the basics of programming. It does not assume any prior knowledge of computers or languages or compilers. A student will learn the different programming constructs, how to use them, the syntax of the chosen language (currently C), how to write/edit a program, compile and run it, etc. The course will use simple tools to ensure that the focus remains on learning programming and the student is not distracted by the complexities of any special environments and tools.

The course will be heavily driven by programming assignments. These will be individual assignments and a student has to do these assignments alone. For most assignments, students will have to demonstrate the working to the Instructor/TA in the lab and convince them that they have done it themselves.

As there are some students who have some prior programming experience, and some who have none, a single pace will not serve the two groups. The basic course will be targeted towards students without any programming experience. However, to challenge those who have programming experience, it is expected that in many assignments there is a "advanced" programming problem – anyone who does it gets a bonus of no more than 10% for that assignment (it is not for marks but for challenge).

Discrete Mathematics

Credits: 4;

Pre-requisites: -

Post Condition (on student capability after successfully completing the course):

- Familiarity and the capability to apply mathematical principles and techniques essential in the area of Computer Science.
- Ability to choose the right proof techniques for a given problem
- Ability to state a problem unambiguously using formal logic.

Brief Description.

The course provides the mathematical background required for

- describing a problem, system or the behaviors of a program unambiguously,
- verifying or proving the correctness of a program,
- estimating or analyzing the complexity of a programming system.

This requires basics of propositional and predicate logic, proof methods, combinatorics, algebraic structures, graph theory, recurrence relations. The main contents and assignments (with expected effort) of this course are: Sets and functions, Propositional and predicate logic, Combinatorics, counting, polynoms, modular arithmetic, group theory, trees and graphs, recurrence relations, master theorem, etc.

Digital Circuits

Credits: 4

Pre-requisites: None

Post Condition (on student capability after successfully completing the course):

- Understanding of binary logic, Boolean algebra concepts and design & functioning of simple digital circuits.
- Ability to model simple digital systems using a hardware design language (VHDL).

Brief Description

Digital design is concerned with the design of digital electronic circuits. Digital circuits are employed in all modern day equipments such as digital computers, mobile phones, audio-video devices, industrial control systems etc. The objective of this course is to give the students the theoretical basis & practical skills in design of simple digital systems. The design methodology, systematically introduced & used in the course, is based on simulation & synthesis with the hardware description language (VHDL) tools. The material in this course involves the introduction of digital signals, Boolean logic and algebra, truth tables, logic gates, storage elements, sequential networks, and finite state machines. We discuss the design and analysis of combinational circuits as schematics, truth tables, and logic equations, along with the strategies for converting between these representations. For sequential circuits, we begin with one-bit flip-flops and combine them to form registers and counters, also demonstrate the concept of a state transition diagram and the process of translating such a diagram to a sequential circuit.

Effective Communication

Credits: 4 Pre-requisites: None

Post Condition (on student capability after successfully completing the course):

- Ability to confidently present ideas in a public forum in a precise manner
- Improved interpersonal communication
- Improved skills in making a general presentation.
- Ability to effectively communicate a concept through a written note.
- Ability to properly communicate through emails (i.e., email etiquettes)

Brief Description

To make use of the opportunities and meet the challenges of the modern world, students need to develop effective communication skills. This is a skill that is most often quoted as lacking in engineers and IT professionals. Proper communication skills are also extremely important in interpersonal relationships. This course will help students in becoming confident and effective communicators, who can project themselves positively to others. Students will learn step-by-step, systematic methods to enhance their communication skills through discussions, group activities, questionnaires, individual exercises and practice sessions.

The course involves 39 contact hours of classes and a few hours to be spent every week by the students doing home assignments. The 39 contact hours of classes will be completed in 12 sessions of 3 hours each. The main content and assignment of this course are as follows

Methodology:

- Lecture cum discussions, role plays, Individual and/or grup presentations and evaluation, mock group discussions
- Audio/visual recording for feedback
- **Tournament methodology**: A tournament tracker aids in encouraging class participation by creating an environment of healthy competition.
- Students will make Action Plans based on SMART [Specific, Measurable, Achievable, Relevant & Trackable (Time-bound)] concept. These action plans will be copied to the institution and one copy will be with Astrum. This will ensure that the institution and Astrum can track the progress of the students by interacting with them regularly

-----SEM II -----

Computer Organization

Credits: 4

Pre-requisites: Digital Circuits

Post Condition (on student capability after successfully completing the course):

- Understanding of assembly language instructions and how they are executed using electronic signals.
- Ability to design a simple processor using a hardware design language

Brief Description.

This course will cover the basic organization of a computer and will discuss elements like CPU, memory, bus, peripherals etc.

Data Structures and Algorithms

Credits: 4;

Pre-requisites: Intro to Programming, Discrete Maths

Post Condition (on student capability after successfully completing the course):

- Ability to convert a given problem into suitable formal representation
- Ability to use suitable data structures and algorithms to efficiently solve some problem using software programs.
- Ability to develop 500+ line efficient programs

Brief Description.

This course teaches the basic data structures and algorithms for performing operations on these data structures, using data structures to provide software solutions that are efficient, and some algorithm paradigms for building efficient algorithms.

Theory of Computation

Credits: 4;

Pre-requisites: Discrete Structures

Post Condition (on student capability after successfully completing the course):

- Understanding of that the essence of a problem or a machine can be identified by looking at its abstract presentation.
- Ability to abstract from a concrete problem to an abstract model.
- Familiarity with basic grammars and machine models of Computer Science. Ability to set up simple grammars, to"program" the machines and formulate proofs of correctness.
- Familiarity with the concepts of nondeterminism, decidability and recursive remunerability.

Brief Description.

The course gives an overview over basic formal grammar and abstract machine models of Computer Science and studies the properties and limits of each of them. In particular, finite automata, pushdown automata, context-free grammars and Turing machines are introduced. Based on Turing machines the concepts of (un)decidability and recursive enumerability of a problem are introduced

Computer System Management – I

Credits: 2; **Pre-requisites**: Some programming and familiarity with computer **Post Condition (on student capability after successfully completing the course)**:

- Ability to manage and configure a personal computer to provide best results.
- Ability to troubleshoot computer hardware and software issues
- Ability to setup and manage a small computer network containing the key servers
- Ability to troubleshoot computer network and Internet related issues

Brief Description

This course is primarily to develop the skills in a student to effectively manage and configure his personal computer to provide best results and to set up a small network consisting of servers and a few clients. The student should be able to develop a conceptual understanding of PC internals, Computing Environment, Computer Networks and Internet which would enable them to diagnose and troubleshoot hardware and software problems. This course is primarily a practical oriented and lab-based course with little "theory". Lectures will be primarily to give some background knowledge about the topic.

There will be 13 lectures of 1.5 hours and associated Home & Lab Assignments. The course covers: Troubleshooting Hardware Issues, Supporting And Troubleshooting

Desktop OS and Applications, Managing, Supporting and Troubleshooting a UNIX system, LAN and WLAN Setup and Troubleshooting, Designing a Computing Environment, Setup, Manage and Troubleshoot Internet Applications, Wired and Wireless Network Security

-----SEM III-----

Advanced Programming

Credits: 4;

Pre-requisites: Intro to Programming and Data Structures

Post Condition (on student capability after successfully completing the course):

- A decent proficiency and understanding of the object-oriented paradigm (OOP), including ability to define classes, instance variables, methods, packages, interfaces, constructors, inheritance, etc in a chosen language (Java)
- Ability to use Java Exception handling classes, File I/O, Swing toolkit, etc.
- Some understanding of and ability to do concurrent programming in Java
- Ability to use an IDE to efficiently develop programs
- Ability to develop a 1000+ line program to solve a given problem.

Brief Description.

The Advanced Programming course is a successor to the Introduction to Programming and Data Structures course. This course teaches some advanced programming concepts. It builds upon prior knowledge of students about programming using an imperative language like C. This is going to be an intensive hands-on course and is going to heavily based on programming assignments. The course begins with a discussion on Introduction to Object Oriented Paradigm and Programming Concepts. Students will learn the key elements of a typical object oriented application such as objects, classes, messages, interfaces, abstraction, inheritance, encapsulation and polymorphism. We will make use of Java language to demonstrate the concepts. However, the concepts can be applied using other programming languages. After covering the basics of object oriented programming, we will cover advanced Java programming with Threads , GUI programming and Collections Framework. In the end, we will explore Software Design Patterns and discuss some of the common design patterns such as Singleton, Factory Method Proxy, Iterator, Observer and Adapter. The integrated development environment (IDE) used in the course will be Eclipse (or BlueJ).

Probability and Statistics

Credits: 4

Pre-requisites: Programming and Calculus, at least 2nd year standing **Post Condition (on student capability after successfully completing the course)**:

- Good understanding of fundamentals of probability models, statistical theory and associated mathematical concepts
- Ability to apply statistical methods to applied problems in computer science

Brief Description

The objective of this course is to provide the students basic knowledge about probability and statistics with applications. The course will include probability theory, discrete and continuous distributions, stochastic processes and Markov chains. The study of these topics will prepare the background of students to pursue statistical theory or methodology and analyze data in any stream of computer science. The students will also be able to gain some experience with a statistical software tool.

Operating Systems

Credits: 4

Pre-requisites: Strong C Programming, Data Structures **Post Condition (on student capability after successfully completing the course)**: At the end of the course the student should:

- Understand fundamental concepts such as Processes, Threads, Scheduling, Deadlocks, Memory, and File system and how they can be implemented.
- Understand the theoretical and practical implementation of concurrency and synchronization.
- Ability to use an existing operating system effectively for building system software.

Brief Description

Operating system is an interface between hardware and user; it is responsible for the management and coordination of activities and the sharing of the resources of the computer. The operating system acts as a host for applications that are run on the machine. As a host, one of the purposes of an operating system is to handle the details of the operation of the hardware. Operating systems offer a number of services to application programs and users. Applications access these services through application programming interfaces (APIs) or system calls. By invoking these interfaces, the application can request a service from the operating system, pass parameters, and receive the results of the operation. Users may also interact with the operating system with some kind of software user interface like typing commands by using command line interface or using a graphical user interface.

The course on Operating System has two components: *theory* and *programming*. Theory component covers the underline concepts and principles of operating system whereas programming component involves the practical implementation of theoretical concepts.

Critical Reading and Discussion

Credits: 2; Pre-requisites: None

Post Condition: After successfully completing this course, a student's ability to critically evaluate and discuss ideas should have improved considerably. In addition, this course will further enhance reading, presentation, and listening skills, as well as make the students better informed about the world of ideas that will improve their thinking and positive living skills.

Course Structure

In this course, students will read some influential essays, critically analyze them by also reviewing views and criticisms, and discuss them.

A set of about 10 essays will be read during the course of the semester. Each week one essay will be assigned, and students will be asked to read these during the week. In the next class, they will provide a small critical summary of the essay, and have a discussion on it in a panel discussion format.

The course will meet once a week for 1.5 hours. (It will be better if this course is done in smaller class size – if that is done, then there will have to be two sections of this class).

-----SEM IV-----

Sem IV

Databases and SQL Algorithm design and analysis Computer networks HSS-2 [Digital Communications]

Fundamentals of Database Systems

Credits: 4

Pre-requisites

- Data Structures
- Working knowledge of programming in C, C++ or Java and experience with Unix

Post Condition (on student capability after successfully completing the course):

At the end of the course, the student will be able to

- Understand database design
- Use SQL effectively
- Understand the internal working of the DBMS including concepts such as indexing, query processing and optimization, transaction processing, concurrency control and recovery.
- Develop database applications for handling some real-world problems

Brief Description

The overall objective of this course is to provide a comprehensive overview of the fundamentals of database systems both from a user perspective as well as from a system perspective.

From the user perspective, we will cover various concepts, which are aimed at equipping the students with the ability to use relational database management systems. Hence, we will discuss topics including (but not limited to) relational database design and normalization techniques, different types of data models and SQL. From the system perspective, we will focus on equipping our students with a deeper understanding about how database systems work so that they can become more sophisticated database users/administrators. Thus, we will be covering topics such as data storage and indexing, query processing and optimization, transaction processing, concurrency control and recovery techniques. In essence, the course is designed to cover the fundamental database concepts and the implementation techniques that are used in relational database engines.

-----SEM V -----

Introduction to Software Engineering

Credits: 4

Pre-requisites: Advanced programming, and Databases and SQL

Post Condition (on student capability after successfully completing the course):

- Students should have the ability to successfully execute a software project for developing industrial-strength software.
- Have the conceptual foundations to undertake advanced course in SE

Description

The course focuses on the basic principles of software engineering and how they are applied on software projects. List of topics contents include:

- 1. Introduction industrial strength software, problem of software development, problem of scale, basic process-based approach, etc. (1 week)
- 2. Software Process Models concept of processes, ETVX model for process specification, different process models and when they are useful (1 week)
- 3. Requirement analysis and specification the basic problem, the sub-phases in the phase, analysis techniques (structured analysis), specification, validation, function point analysis (2 weeks).
- 4. Project planning effort, schedule, quality, project monitoring, and basic CM (2 week)
- 5. Design principles and structured design methodology partitioning, top-down and bottom-up, step-wise refinement, coupling and cohesion, (2-3 week)
- 6. Coding style, structured programming, verification concepts (1 week)
- 7. Testing testing purpose, levels of testing, black box testing, white box testing, different test case generation approaches (2-3 weeks)
- 8. Other topics object oriented, metrics, standards, industrial practices (rest of the time)

Technical Communication

Credits: 2; Pre-requisites: 3rd Year Standing

Post Condition: After successfully completing this course, a student's should have a decent ability to understand technical papers, write technical papers, and present technical material. That is, the course will develop all the three communication capabilities – reading, writing, and presenting – for technical works.

Course Structure

In this course there will be first a few lectures on what good communication is – how to read a paper, how to write one, and how to present. Some example papers will be taken that will be read and discussed in class, both for understanding (i.e. reading) as well as the writing style (to learn about writing). For this part, a few classic papers will be taken, and then they all students will read it and discuss them in class.

The students will then be allotted some topic (or they can select), on which they will have to do some background research, and then write a technical article on that topic.

They will also have to make a presentation on this to the class.

Preventing Ragging and Establishing a New Culture in IIIT Delhi

In IIIT Delhi we hope to build a culture of mutual respect and support where senior students support and help new students (freshers) settle more easily. So, instead of ragging, we hope to start this new culture and lead the way for the rest of the country. This document briefly identifies the Dos and Donts by the Seniors and the Freshers, which we will distribute among students, and what we plan to do to develop this alternative.

Responsibility of Seniors and their Dos and Donts:

- You may, and should, interact freely and in a friendly manner to incoming students. You may help them, guide them, etc.
- However, at any point during interaction, if the fresher is feeling uncomfortable, you must stop the interaction and allow him/her to leave.
- You may not ask a fresher to do anything for you (e.g cannot ask him to get a glass of water, or fetch something)
- You may not invite a fresher to your room for the first two months. Those students whose rooms are used for any "ragging" are liable for disciplinary punishment even if they do not participate in ragging themselves.
- You cannot ask a fresher to call you "sir" or "madam". All students will refer to all others as other students do generally by their name.
- For any incidence of ragging, besides any punishment given to the individuals involved, the entire batch of the involved students will have to sign an apology letter to the Institute and to the incoming batch it is the responsibility of the entire batch to prevent ragging; it is not sufficient to say that "I am not involved". The entire batch may also be asked, as part of their apology and making-up, to "treat" the entire junior batch.

Rights of "Freshers"

- You may, and should, interact with seniors in the Institute freely and in a friendly manner; seek advise, help, etc.
- However, you have a right to refuse to join a senior (or a group), and/or leave a meeting/interaction with a senior student (or a group) if you feel uncomfortable, without stating any reason.
- For the first month of your stay, you are NOT allowed to enter into the hostel room of a senior entering a senior's room will be construed as an act of indiscipline on your part.
- You may refuse to do any task that a senior asks you (It is recommended that you do this politely "Sorry, I cannot do xxxx")
- You may not call any senior as Sir/Madam/... all seniors are to be called by name as they are called by other students in the institute.
- You have a *right and a responsibility* to report any attempts of ragging to the concerned authorities the Institute will ensure that you have the necessary support for this.

Other Mechanisms for Avoiding/Preventing Ragging

• Small mentor-pairs of senior students will be formed who will promise to help incoming freshers and prevent ragging from occurring. They will be given certificates for their work in maintaining discipline and harmony.

- A few of the incoming students, who are more able to withstand pressures, will be nominated as representatives of the incoming batch. Their names will be announced, and any fresher can report a ragging incident or an attempted to any of these, who can then report it to the authorities.
- We will invite the incoming batch a little earlier to the Campus, so we can make them aware of their rights and responsibilities and make them feel comfortable, and also organize them a little so they can resist any ragging attempts.
- Any incidents of ragging will be dealt with swiftly by the disciplinary committee, and any suspensions/expulsions will apply immediately.
- There will be a brief meeting with mentors and representatives of the incoming batch every day for the first two weeks, then every week for the next two months.
- There will be a talent show function organized by incoming students after about two to three weeks. (Generally, this show is considered as the end of the "ragging" period.)
- Later we will take an anonymous survey to evaluate the effectiveness of these measures.

Student Governance at IIIT Delhi

Any good academic institute must have structures for student governance which listens to students voice for matters relating to student affairs. For a young Institute, it is not desirable to have elaborate mechanisms (like, for example, the student Senate in IIT Kanpur) for this in the start. *The current proposal for student governance is for the next five years, after which a new structure may be evolved*.

Student Council

Student council will be the main body representing students in all student related matters in the Institute. Its composition will be as follows

- Two students from each UG batch, who will be elected by the batch in the month of January each year. The election will be conducted by the Dean of Student.
- Two students from each PG program. Similar process will be followed.
- Student coordinators for sports these will be selected by the students in consultation with the Dean of Students.
- Each meeting will be coordinated by one of the members, who will be nominated by the Dean, and may be rotated. The coordinator will write and circulate the minutes of the meeting.
- Student coordinators for identified activity clubs students will select in consultation with the Dean.
- Dean of student affairs will be the Patron of this council and a permanent invitee to all meetings; he/she may nominate some faculty member or staff for this.

Student Representative to Academic Senate of the Institute

• Two student representatives to the academic senate. These will be from the student council and may be nominated or elected by the council

Some Guidelines and Scope

- The scope of student council is limited to academic and extra curricular activities within the context of the Institute. The student council will be the main student body for these activities.
- The council will decide which clubs to start, which activities students should participate in, etc. All such decisions must be approved by Dean of Students.
- Any student representative must have a CGPA of 7.0 or above.
- Student council will have a say in allocation of budget for student activities.
- In most matters where student interests are involved, student council will be invited to send a representative to give student's view.
- Minutes of all meetings of the student council will be recorded, and sent to all members and invitees. All council meetings must be open to all students to attend.
- Any change in scope and structure of student council must be approved by the Dean of Students.

Minutes of the 3rd Senate Meeting held on June 9, 2009, IIIT-D (transit) campus.

Members Present: P. Jalote (Chairman), V. Bansal, A. Kiehn, V. Goyal, M. Vatsa, R. Singh (IIITD), S. Arora (student member), S. Maitra (student member), Dr. A.R. Subramanian (Registrar & Secretary). *Through Audio Conference*: Saugat Sen (Cadence); C. Anantaram (TCS)

- 1. Confirmation of the Minutes of the 3rd Emergency Meeting held on 28th April 2009. Minutes were confirmed through circulation. They were tabled.
- 2. **Report on PhD Admission.** The senate commended the Institute for a highly successful launch of PhD program. The list of students who were offered admission was accepted.
- 3. **BTech Admission for 2009.** The Director informed that the eligibility criteria for admission that was recommended by the Senate earlier, was accepted by the Board, which specified the actual eligibility percentage as 80% for general candidates. The Senate agreed that the Director be authorized to go ahead with admission based on these criteria, and a competitive exam.
- 4. **Foundation Courses.** Each course whose description was presented was discussed. The course contents were accepted with minor changes, except for "Intro to programming course". Minor suggestions were made both to contents as well as pre-requisites of other courses, and the Director was requested to incorporate these changes.
 - Intro to Programming. A suggestion was made that instead of C, the Institute should consider a scripting language like Python, as it is contemporary, and has other benefits as well. It was decided that the Director will obtain inputs from other quarters and then this issue will be discussed again.
 - Discrete Maths. It was suggested that it should be aligned better with the Data structures course and can leave some of the material for that course.
 - Communication skills. It was suggested that the component of presentation can be enhanced.
 - Computer Organization. Writing simple assembly programs should be in the post condition.
 - Computer Systems Management I. Awareness of latest technology to compare options and make choices should be made as an objective.
 - Advanced Programming. The course is too ambitious and elements like Swing etc may not be feasible. It was suggested that some assignments should be web-based programming (e.g. an order book)
 - Probability and statistics. There should be a focus on examples and applications. Role and methods of statistics in design should also be discussed, besides its role in analysis.

- Database systems. Its goals should be clarified regarding database design and design of the underlying database system.
- Software Engineering. Have appreciation of industry concerns should be a goal of the course. For motivation in this course, folks from industry can be invited.
- 5. **Student governance structure.** The proposals was accepted with minor modifications. The Director was requested to make the suggested changes.
- 6. **Measures to Prevent Ragging.** The senate appreciated the measures that are being planned. However, it felt that there is a greater danger of ragging of incoming IIITD students by NSIT students. For preventing this, it was suggested that senior IIIT-D students be requested to "protect" the incoming students from ragging by outside students. The senate also felt that no certificate need be given to mentors from the senior batch who will help in ragging prevention.