Appendix A: Broad Functional Requirements Specifications (FRS) for the proposed ERP System

The purpose of this annexure document is to list-out the functional requirements specifications (FRS) of the ERP system for IIT Hyderabad. These modules and FRS are only indicative of the nature of work being done by various sections at the Institute. At the time of implementation, the bidder shall be required to improvise the same and may also have to add some related modules for automating activities of all the sections at IIT Hyderabad.

भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Indian Institute of Technology Hyderabad

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Modules under Dean Administration (Core and other modules)

Module Name: Finance and Accounts Module (Core module)

Finance and Accounts Module should have all basic functionalities(basic to advanced functionalities) that are essential for any education and research Institute with a student strength of 20000 students. F&A module should have the following sub-modules:

1. Complete Accounting PAckage with dynamic reports covering many financial years.
2. Complete Budgeting Module
3. Complete PAyroll package including INCome Tax calculation etc.
4. Semi- HR module , to facilitate integrated functioning with HR Section
5. Semi-Student Module to facilitate integrated functioning with Student & HOstel Sections including Student Fee collection from the date of joining
6. Semi-Stores and Purchase module
7. Semi- R&D Accounts Module
8. Semi-CMD (Construction and Maintenance Division) module for construction and estate Management
9. A module with integration with Hospital / Dispensary
10. A modjule with integration with Administration
11. A module with integration with Guest House
12. A separate module for Tax Administration , like GST , Income Tax TDSs, other Statutory Liabilities (labour cess, seignorage , professional Tax).
13. A separate module for Invoice Raising and GST collection, remission, availing GST Credit
14. Financial reports like Annual Accounts in MHRD format, Cash Basis and Accrual Basis
15. PFMS integration
16. Integration with external agencies like Banks, Income Tax , GST, PFMS , NPS, Professional Tax etc.
17. The system should allow for importing legacy data from excel data and reports should consider this legacy data also.
18. System should allow for auditing and complete audit trail and audit log
19. The list is not exhaustive and further requirements can be added during the development stage.

Some of the functionalities required for a Finance and Accounts are given in detail below:

Input	Inputs are two types: 1. Personal Claims: TA, Advances etc. 2. Official Claims: PO payments from Stores, Contract Payments from CMD etc.
Process	Stage One: 1. Once the bill is entered into the System, the user will submit online and take a print of the form attach it with relevant papers like tickets, Boarding Passes etc. and submit the same to Accounts Section in inward. If printing is not preferred, we can fill an online form and

	submit the relevant receipts/boarding pass, etc. in the accounts section against the system generated ticket number
	2. Provisions should be made so that guest visitors can also do the same.
	3. The Inward will accept the bill and an inward number will be generated. The bill will be assigned to the concerned dealing assistant automatically. Dealing Assistants will verify the bills and submit the processed bills to the Assistant Registrar / Deputy Registrar.
	4. On approval, the bills will be forwarded to DDO.
	5. On approval of DDO, the bills will be forwarded to Payment section.
	6. Payment Section will verify the availability of Funds, Budget and enter the cheque details. A single cheque can be used for multiple payments and in such case a Bank Advise Letter will be generated. Cheque Printing facility is required. Once the cheque is printed and signed, the same will be sent to bank.
	7. The next day, the Payment seat will update the payments with UTR number and a mail has to be sent to all payees of the details of payment.
	Stage Two:
	1. Monthly Tax remission and challans have to be generated.
	2. Generation of Tax returns in Prescribed forms is required.
	3. PFMS upload statements monthly / periodically have to be generated
	4. Monthly Statements to MHRD are to be generated
	5. Bank reconciliation statements
	6. Fee dues receivable and collection reports
	7. Monthly Expenditure Reports
	8. Pay slips
Output	Reports needed as below:
	1. Annual Accounts as per MHRD Formats
	2. PFMS Upload formats, Utilization Certificates
	3. Budgeting Formats (Monthly, Quarterly and Yearly), and Projections
	4. Form 16 and Form 16A
	5. Query Based reports for various scenarios
Interface	1. This should be able to maintain department-wise budgeting and accounting
	2. It should have a full-fledged accounting module which can maintain ledgers, groups of ledgers, General Ledger, Trial Balance, and prepare Annual Accounts in formats prescribed by MHRD including Preparation of P&L account, Income and Expenditure Account, Balance sheet, Receipts and Payment Account. Preparation of accounts both on cash basis and accrual basis should be possible. Maintenance of Bank

	Accounts, preparation of Bank Reconciliation Statement online, Preparation of scheme-wise accounts, and preparation of Utilization Certificates should be enabled.
	3. Upload of legacy data should be enabled.
	4. Integration with all concerned sections is required.
	5. The system should allow preparation of various static and dynamic reports.
	6. All the users i.e. Faculty, Staff, Students and Vendors should be able to interact with the system and able to raise their requests for advances, settlements, reimbursements, recoveries only through the ERP.
	7. Functionality for tax administration i.e. to define various taxes, their rates of deductions in different periods, deduction in each bill, remission and its accounting and generation of tax returns in prescribed formats is required.
	8. Maintenance of accounts as per the scheme codes and scheme components defined in PFMS and EAT module of MHRD are required. PFMS Upload reports are required.
	9. Request for Booking of Air tickets and their subsequent matching with the TA claims should be possible.
	10. Budgeting: Functionality to define budgets and allow expenditure department-wise, section-wise, HOD-wise, Faculty-wise, purpose-wise and ledger-wise, group-wise, OH-wise, period-wise are required. Facility to prepare projected expenditure is required.
	11. Functionality for Costing, i.e. facility to define cost centers and reports to assess the costs is required.
	12. Dispatch Functionality, to maintain inward, outward and to see the time taken to process various bills, facility to return/hold bills online with remarks is required.
	13. Cheque Printing Functionality and Bank Advise letters are required.
	14. Data migration from Tally system and its sanity check.
	15. For contracts and Agreements, where multiple bills are generated, facility to maintain cumulative amounts as per the Schedule of Payment is required.
	16. Facility to record Bank Guarantees, EMDs and Security Deposits collected and returned is required.
	17. Fixed Deposits and Investments management
	18. Separate Accounting for Conferences and Events. (Receipts and Expenditure)
	19. Issue of Medical Referral letters
Workflow Management	Inward Section ☐ Dealing Assistant ☐ Assistant Registrar ☐ Deputy Registrar ☐ DDO ☐ Payment ☐ Accounting and Reconciliation ☐ Reports.
Remarks	1. Inward Section

a. Starts with Inward seat of Accounts Section accepting the Hard copy attachments like boarding passes, Tickets for personal claims and invoices / duly passed bills from Administration / CMD etc. for office related payments and issuing an Acknowledgement in the System

2. Dealing Assistant
    a. The dealing assistant will be decided whether the Expenditure has a proper sanction, approval and budget, the invoice is in correct format and rejects if any one of this is missing.
    b. If these conditions are satisfied, then the amounts will be restricted to approved limits and submits the bill to Assistant Registrar (for bills up to a limit say Rs 2 lakhs) and to Deputy Registrar through Assistant Registrar (for bills valuing more than Rs 2 lakhs).

3. Assistant Registrar/ Deputy Registrar
    a. AR / DR may pass the bill or reject the bill for reasons to be recorded or hold the bill for clarifications. In each case the bill will be pushed back to the Dealing Assistant for resubmission

4. DDO
    a. All bills passed by AR/ DR will be transmitted to Drawing and Disbursing Officer for approval, who may again accept or reject the bill

5. Release of Payments
    a. All bills approved by DDO will be forwarded to Payment Assistant who will enter the cheque no., amount, the account details of the Payee etc and prepare a cheque, obtains the signature of the AR/DR/DDO on the cheque and send it to bank for payment

6. Accounting, Bank Reconciliation and PFMS Entry
    a. UTR no.s / reference no.s of all payments completed will be entered into the System for reconciliation and for sending an intimation to the concerned, for making proper Accounting entries and for entry in PFMS EAT module.

Various Kinds of Forms are as below. This is not exhaustive list.
TA Advance
Temporary Advance
Reimbursement
TA Claim / Settlement
Temporary Advance Settlement
Imprest Advance
Telephone Reimbursement
NPS Withdrawal request,

Medical Reimbursement

By Payroll Section:
1. Monthly Payroll and recoveries particulars
2. Tax deductions and remissions
3. Supplementary Pay Bill
4. Honorarium Claims
5. DA Arrears claims

By Establishment:
1. LTC Advance
2. LTC Final Claim
3. EL Encashment
4. Service End- claims
5. Increment
6. Promotion
7. Placement
8. Pay Fixation
9. Children Education Allowance

By Administration:
1. House Keeping Bill
2. Manpower Bill
3. Security Bill
4. Pest Control Bill
5. Garbage Bill
6. Catering Service Bills
7. Publicity Bills
8. Other Miscellaneous Bill

By Stores:
1. Purchase Order – Advance
2. PO- Final Settlement
3. LC
4. FTT

By Academics:
1. Stipend
2. Fellowship
3. Scholarship
4. PhD Thesis Evaluators Bills

By Director Office: TA Bills. Visitors' Honorarium etc.
By CMD Section:
1. Electricity Bill
2. Water Bill
3. Work Order Bill
4. RA Bill
5. Hand Receipt Bill
6. Bank Guarantees
7. EMDs and Security Deposits

By Hostel:
1. Caterers Bill
2. Water Bill

	3. Other Bill

	By Dispensary:
	   1. Apollo Pharmacy Bill
	   2. Specialist Services Bill
	   3. Other Bills
	
	By Guest House: Dry cleaning Bill
	
	By Computer Centre: Bills
	
	By Green Office:
	   1. Plantation Bill
	   2. Road Cleaning Bill
	   3. Other Bills
	
	HEFA Loan Administration
	JICA Related Expenditure Administration and Control

Sub Module: Payroll and Taxation Module

Input	1. It should start with the Employee Creation from Establishment Section along with full details i.e., Family and Dependents as these are required for many other activities connected with the Accounts Section. 2. the Payroll process starts with attendance and leave data forwarded by Establishment . 3. The Pay levels, Grade pay needs to be defined both as per 6th PAy COmmission and 7th PAy Commission. 4. Any changes is Pay , Pay Level due to Promotion / Increment etc. will be carried out by Establishment Section after obtaining due approvals. The career progression of each employee from 2008 needs to be captured in the system. 5. 6. On submission of monthly attendance by Establishment Section, the payroll will be generated by AR (pay roll) for each group of employees separately. 7. CMD section will record the recoveries to be made towards License Fee, Electricity and water charges for all employees and approves the same and this will be reflected to AR (Payroll) 8. AR (Payroll) will add further recoveries if any have to be made from individual salaries employee wise. An Excel sheet upload will be useful. 9. R&D Section will record the honorariums etc, if any paid by them to the employees / faculty and the income tax if any deducted for the particular month. 10. Faculty / staff may report any other income received from any sources received like for attending guest lectures , selection committee meetings etc in the

	particular month and also report tax if any deducted by the third parties. 11.
Income Tax Process	1. Provision for definition of INcome Tax rates applicable for each financial year and various rebates / exemptions available under the Income Tax under various years needs to be defined by the system. Provision for updation / definition of new items should be available. 2. Income Tax to be deducted and remitted to the GoI employee's salaries is based on the Income for the whole year and other income defined by the deducted every month based on an estimated salary for the whole year. System should be capable of providing the estimated salary for all employees and the estimated tax to be deducted every month. 3. In calculation of the tax to be deducted, the system should consider the other incomes declared by the employee, and other payments made to the Faculty in R&D Projects also. 4. Tax deductions under various sections needs
Process	
Output	Reports needed as below: 1. Payroll Software should be able send Pay slips through Email and self-driven downloadable one. 2. It should provide the Reports to be sent to Bank such as Payment Advices, Income Tax Challans to be sent to Bank and for Online Payment, etc., 3. The Form-16 and Form-16A's also to be downloadable whenever the Employee needs. 4. The Reports software should be dynamic and flexible as different reports are to be sent MHRD frequently. 5. All the Statutory Forms and Payments Reports should be generated. 6. The Reports generated should be downloadable in Excel, Word, PDF and any other user-friendly mode. 7. Report showing the Pending Advances age-wise for follow up and settlement. 8. Report calculating interest for delayed settlement of advances. 9. Imprest Reports.
Interface	1. It should able to capture the Attendance. 2. It may be used for Guest House expenses booking under Payroll. 3. To enter External data for recovery or payment, there should be an Excel Upload source. 4. The Civic Charges of Quarters should be enabled to record and recovery. 5. The Income and Tax Sources from Jee, Gate, R&D and others should also be enabled to record and recover the Taxes from Payroll. 6. External Source of Income and also the Taxes should be allowed.

	7. There should not be any limit in creating the number of Employees and also in creating the Accounting Heads.
	8. Dealing Assistants who wants to send the recoveries from salaries should be allowed like LTC Advance, TA Advance etc.
	For Reimbursements, Advances and Settlements:
	1. The Employee mode should be enabled and allowed to claim Reimbursements, Advances and Settlements by Employee themselves.
	2. They should be able to claim and view the status of their claims.
	3. All types of claims by employees should be enabled.
	4. Submission of Claim Forms in PDF along with Bills and Invoices.
Workflow Management	
Remarks	1. The software for payroll may be fully utilized by Accounts Section and partially by Establishment Section, Hostels, CMD Office, Administration, Transport Section, etc.
	2. Apart from the above-mentioned requirements there can be additional requirements on developing the software which can be added at that time.

Sub Module: Student Fee related Accounts Module

Input	
Process	
Output	
Interface	1. Defining fee structure
	2. Generating Fee demand student-wise
	3. Generating SBI collect Upload statement
	4. Matching of the fee collections with fee demand based on SBI collect report
	5. Maintenance of Student Loans
	6. Vidyalakshmi Scheme payments is required.
	7. Functionality for Student Stipends, Fellowships and Scholarships payments and their account is required.
	8. Certain scholarships/refunds like merit cum means scholarship and EWS scholarship, etc. will require parents' income certification. Provision for the same must be made
Workflow Management	
Remarks	

Module Name: Human Resource (Core module)

Sub Module: Recruitment

Input	1. Publish advertisement
	2. On-line application
	3. Application scrutiny
	4. Dept. committee formation
	5. Departmental shortlisting
	6. Final shortlisting by institute
	7. Online comment by reviewers
	8. Online assessment by referee
	9. Selection Committee formation
	10. Call letter processing
	11. View access to experts
Process	· Uploading documents (pdf, word, excel)
	· Taking input data (based on the parameters) to sort out the applicants' information – preliminary shortlisting of the applicants
	· Able to provide privileges to the committee members/Experts to view and give their remarks
Output	· Should generate and download the reports (applicants data in pdf, excel and word formats)
	· Publish the Results
	· Issue of Offer of appointment letters

Interface	Director, Dean-Admin, Dean-Faculty, Members of Scrutiny Committee, Members Review Committee, Members of Selection Committee, DR (HR) & Section Director, Dean-Admin, Dean-Faculty should have the privilege to restrict the access to the above members at different levels
Workflow Management	Advertisement -> receipt of the applications -> generation of sheets -> formation of committee(s) -> assessment of applications by the committee -> publishing shortlist of the candidates -> mail communication to the candidates (call letter) ->access of application data to the Selection committee members -> data entry ->publishing results ->mail communication to the candidate (offer of appointment)
Remarks	

Sub Module: Joining Formalities

Input	1. Relieving order from the Previous employer 2. LPC from the Previous employer 3. Experience Certificate from the Previous employer 4. Medical fitness certificate 5. Joining report 6. Forms of Character & Antecedent verification 7. Hometown declaration 8. Details for email creation 9. Details for ID Card 10. Details for Medical card/book
Process	· Uploading documents/Images · Data Entry · Sending requests to other department(s) · Pay fixation

	· Obtaining approvals from the authorities
Output	· Issue of Joining Order · Creation of email id · Issue of ID Card · Issue of Medical Card/book(s)
Interface	For pay fixation and Joining Order ARs(HR)>>DR (HR)>>JR(F&A)>>Registrar>>Dean-Admin>>Director For creation of email ID HR section & Computer Centre For issue of ID Card HR Section & Security office Issue of Medical Books HR section & Admin Section
Workflow Management	Uploading documents -> Entry of Details -> generate notes for approval -> generate Joining orders for issuance, creation of email-id, generate ID card for printing, generate Medical book(s) for printing
Remarks	

Sub Module: General Services

Input	1. Service Book
	2. Family declaration
	3. Profile Management
	4. Basic pay and DNI
	5. Character & Antecedents verification reports
	6. Caste verification reports
	7. Annual increment processing
	8. PRAN details
	9. Self-appraisal for Faculty
	10. APAR for Staff
	11. Constitution of DPC committee
	12. Probation clearance
Process	· Uploading documents
	· Updating the details (Data Entry)
	· Uploading images
	· Generating notes for approval
	· Sending requests to other department(s)
	· Obtaining approvals from the authorities
Output	· Generate Profile of the Employee
	· Generate orders of annual increments and communication to the concerned section(s) under intimation to the individual
	· Generation of APAR forms
	· Generation of reports with the details of receipt of C&A and Caste verification reports for probation clearance
	· Issue of Orders

Interface	For Annual increments SO>>ARs(HR)>>DR (HR)>>JR(F&A) For Self-Appraisal (Faculty) Faculty>>Dean-Faculty>>Director For APAR (Staff) Staff, Reporting & Reviewing Officers Probation clearance (Faculty) SO>>AR(HR-Faculty)>>DR(HR)>>Dean (Faculty) Probation clearance (Staff) SO>>AR(HR-Staff)>>DR(HR)>>Dean (Admin) For extension of Probation, final approving authority in both the cases of Faculty and Staff - Director
Workflow Management	Uploading documents -> Entry of Details -> generate notes for approval ->obtaining approval from the competent authority(ies)-> generate orders for issue
Remarks	

Sub Module: Employee benefits

Input	1. Holiday list management
	2. Leave Management

	1. CL
	    2. Vacation Leave (Faculty)
	    3. EL
	    4. HPL
	    5. Commuted Leave
	    6. Maternity Leave
	    7. Paternity Leave
	    8. Child Care Leave
	    9. Extraordinary Leave
	    10. Leave Not Due
	    11. Sabbatical Leave
	    12. Quarantine Leave
	    13. Study Leave

	3. Joining Report
	4. HRA processing
	5. Placement/Absorption/Movement/Promotions
	6. Advance processing for --LTC, Medical, HBA etc.
	7. Loan processing
	8. Income tax declaration
	9. Annual property return
	10. NOC
	a. Applying for outside job/Attending interview
	b. To pursue higher studies
	c. To apply for new/renewal of Passport/Visa
	11. Experience/Service certificate
	12. Internal Transfers (for staff)
	13. Incentives (for staff)
	a. Acquiring higher qualification
	b. Any other

Process	· Uploading documents · Data entry · Generating notes for approval · Sending requests to other department(s) · Obtaining approvals from the authorities
Output	· Issue of No Objection certificate for different purposes as per the input · Issue of Orders for different purposes as per the input · Generation of reports related to annual property returns

Interface	LTC
	Faculty/Staff>>AR(HR-Faculty)/AR(HR-Staff)>>DR (HR)
	Annual Property Returns
	Faculty/Staff>>AR(HR-Faculty)/AR(HR-Staff)>>DR (HR), CVO
	Placement/absorption/movement/promotion
	Faculty/Staff>>AR(HR-Faculty)/AR(HR-Staff)>>DR (HR)>> DPC (Committee members)>> Dean (Faculty)/Dean (Admin), Director
	Leaves (Faculty)
	Faculty requests for leave with needed Information: For CL/RH, the HoD is the sanctioning authority, and the department (or EA) maintains the record. For all other leaves: HoD approves, and then Dean Faculty approves. If there are any special cases (e.g., EOL or Child Care Leave etc), then it will be sent to the Director.
	For CL/RH and other types of leaves of HoDs and Deans: Dean Faculty is the sanctioning authority.
	Leaves (Staff)
	Staff>>Concerned Head of the Section
	NOC (Faculty) –except Passport/Visa
	Faculty>>SO>>AR(Faculty)>>DR(HR)>>Dean(Faculty)>>Director
	NOC (Staff)
	Staff>>SO,>>AR(Staff)>>DR(HR)>>Dean(Admin)
	Experience/Service Certificate (Faculty)
	Faculty>> SO>> AR(Faculty)>>DR(HR)>>Dean(Faculty)>>Director
	Experience/Service Certificate (Staff)
	Staff>>SO>>AR(Staff)>>DR(HR)
Workflow Management	Uploading documents -> Entry of Details -> generate notes for approval ->obtaining approval from the competent authority(ies)-> generate orders for issue

Remarks	

Sub Module: Retirement and Resignation

Input	**Sub-sub module: Retirement processing** · Auto-closure of benefits · Encashment of EL · Gratuity · Issue of service certificate · Issue of LPC **Sub-sub module: Resignation processing** · Auto-closure of benefits · Encashment of EL · Gratuity · Issue of service certificate · Issue of LPC · Transfer of Service Book · Lien details
Process	· Uploading documents · Updating the details (Data Entry) · Uploading images · Generating notes for approval · Sending requests to other department(s) · Obtaining approvals from the authorities
Output	· Issue of the Orders as per the input
Interface	Faculty/ Staff>>SO>> AR(HR-Faculty)/AR(HR-Staff)>>DR(HR)>>JR (F&A)>>Registrar>> Dean (Faculty)/Dean(Admin)>>Director

Workflow Management	Uploading documents -> Entry of Details -> generate notes for approval ->obtaining approval from the competent authority(ies)-> generate orders for issue
Remarks	

Module Name : Management Services (Other module)

Sub - Module : Quarters Booking

Input	-- Display of Vacant Quarters --Obtaining order of preference from the interested employees -- Allotment of Quarters as per eligibility -- Automatic generation of allotment letter and cancellation letter -- Surrendering of quarters (for employees) -- Cancelation of Allotment -- Quarter allotment status is to be linked with the Payroll module.

Sub - Module : Project Staff

Input	-- Project staff personal profile -- Type of Project (Institute or R&D) -- Automatic generation of appointment and relieving orders -- Maintenance of leave records -- Tenure ending alerts -- Extension of tenure -- Termination of tenure

Sub - Module : Dispatch/Dock

Input	Request received from outside
Process	A unique no. has to be generated by system for all the requests which are received/made by MS Section.

Output	Daily reports of requests
	   1. Inward
	
	    2. Outward

Workflow Management	Requests from outside > MS Section > Other Sections
Remarks	Various reports based on the inputs and outputs required

Sub - Module : Complaints

Input	Complaint resolving mechanism for:
	
	 -- Telephone complaints (Landline/Mobile)
	
	 -- Housekeeping Complaints
	-- Mess and canteens related complaints
	-- Pest control complaints
	-- Vendor related complaints
	-- Manpower related complaints
	
	   >Various users should have an option to raise any complaint against the above said matters.
	
	> Each complaint has to be given a unique number.
	
	   > On Receipt of each complaint, the respective staff member should get a notification about the complaint through e-mail.
	
	   > After resolving the issue the employee will update the statue of complaint.
	> On resolving a complaint the user (complainee) should get a notification.

Sub - Module : Transportation

Input	Request for cab bookings/air tickets Required parameters: Employee ID; Date & Time of arrival and departure ; Place of visit; Sanction from competent authority (a provision for uploading of sanction is required)
Process	1. Once any booking was made – a mail is to be delivered to transport office. 2. After allotting a driver number a mail is to be delivered to the requester 3. Option for rejection/cancel
Output	Reports on 1. Daily/monthly requests received Daily/monthly requests disbursed
Remarks	Various reports based on the inputs and outputs required

Input	Institute vehicle details
Process	To store the database of Institute vehicles
Output	Alert on Insurance renewals

Module name: Stores & Purchase Division (Core module)

Input	1. Purchase Indent Request from Indenter. 2. Purchase Sanction Proposal Request from Indenter.

Process	**a) Purchase Indent: -**
	
	1. Indenter defines the Type of Purchase based on the value of the Goods/equipment/service to be procured:
	   a. Advertised Tender Enquiry.
	   b. Limited Tender Enquiry.
	   c. PAC (Proprietary Article Certificate).
	2. Indent will be verified by Joint Registrar/Asst.Registrar/Section officer.
	3. Indent will be forwarded to Accounts/R&D Section for commitment of funds/Budget from Institute/Project funds.
	4. Indent shall be forwarded to Dean (Admin)/Dean(R&D)/Director for Sanction of Proposal as per Delegation of Financial Powers.
	5. For Obtaining Bids/Quotations, Tender document with details will be sent/forwarded to known source of Vendor, it may also be published in CPP portal and /or in Institute Website depending on the mode of Tender.
	6. Reciept of Tender in Stores & Purchase Section will be verified by the competent authority.
	7. After obtaining bids, Indenter will prepare the Comparative Statement & Evaluation of the the bids (i.e., Technical & Financial Evaluation) as the case may be.
	8. Committee will submit their recommendations.

	9. The file with purchase Sanction Proposal submitted by indenter will be forwarded to the Competently Authority duly seeking Approval/Sanction to place the order. 10. Issue of Purchase/work order & Award of Contract (AoC). **b) Purchase Proposal: -.** 1. Store & Purchase Section will define Basis of Selection like Type-1 (Single Quotation <= 25thousand), Type-2(purchase Committee {25,000 Lac>= 2.5 Lac}), Type-3 (Rate Contract of IITH/Other IIT's) & Type-4: Purchase of Goods by obtaining bids/Quotation-> whether it is Single Tender Enquiry/Proprietary, Lowest Bid among Technically Qualified, only office Technically Qualified, only offer Received and Technically Qualified. 2. Different modes of Payment: payment through letter of Credit /Advance Payment/After delivery will be defined by User Indenter. 3. Receipt of Purchase Sanction Proposal will be verified by the competent authority. 4. Purchase Proposal will be forwarded to Accounts/R&D Section for commitment of funds from Institute/Project funds; thereafter to the Director/Dean based on the value of the proposal. 5. Award of the Contract /Purchase Order. ● File is forward to Payment Recommendation by the User Faculty /PI ● Delivery & Inspection will be done, If Installation required the same will be intimated to the Vendor. ● Once material delivered & Installed at location, indenter will forward the invoice to store for making Ledger /Stock Entry. ● forwarding to Account/RD Section for Clearance of Payment. ● Department/Store will do the Physical Verification of Assets/Items.
Output	1. Release of Purchase Order. 2. Delivery & Installation of Material & Payment. 3. Physical Verification of Assets. 4. Creation of Barcode for the asset

Interface	**1. Purchase Indent: -**
	    a. Indenter raise the indent.
	    b. Upload the Specification of the Tender.
	    c. Floating the Tender.
	2. Preparation of Purchase Order: -
	    a. Purchase order No & date.
	    b. Supplier Address.
	    c. Payment Details.

	d. Item Description.
	e. Forward to Supplier copy Indenter, Account RD Section & Office copy.
	3. Inventory Management System:- (Category of Assets)
	    a. LTAS: Limited Time Assets
	    b. LSE: Lab and Scientific Equipment
	    c. FF: Furniture & Fixtures
	    d. MV: Motor Vehicles
	    e. OFE: Office Equipment
	    f. COMPH: Computer Hardware
	    g. COMPS: Computer Software
	    h. EAE: Electrical and Electronics
	    i. MISC: Miscellaneous
	
	● Make, Model, Serial No. of the Equipment
	● Location of the item.
	● Remarks

Workflow Management	Purchase Indent/Proposal → Funds Commitment → Mode of purchase → Receipt of Tender → Comparative Statement & Evaluation(If any) → Recommendation of user faculty/Purchase Committee → Verification of File in Store → Approval/Sanction of Competent Authority → Award of Contract/Purchase order Material Management → Material receipt Entry → Acceptance by Indenter → Entry in Inventory → Consumable /Asset → Barcode Generation → PIR Register Invoice Processing → Processing of Invoice to Accounts
Remarks	File verification by Dealing Assistant-Section Officer—Asst. Registrar—Deputy Registrar.

Academic Purchase/Infrastructure /Stationary

Input	Infrastructure/ Stationary in all Classrooms and Academic Section - Present, Required .
Process	Dealing Assistant(A.P) will find out the requirement of Infrastructure where ever required. Dealing Assistant(A.P) will get clearance from Accounts stating the availability of funds. Approval is taken from Dean(A.P), If required from the Director.

	dealing assistant(A.P)Concerned will inform the requirement to the stores section.
Output	Report of POs, Infrastructure available in Classroom, Infrastructure purchased in Classroom and Infrastructure which is yet to be procured.
Interface	Stores Module, Finance and Accounts Module.
Workflow Management	Dealing Assistant(A.P)> Stores>Accounts>SO(A.P)> Assistant Registrar(A.P)> Deputy Registrar(A,P)>Dean(A,P)
Remarks	Various reports based on the inputs and outputs required

Module name: Guest House Room Booking (Other module)

Input	Booking requests should be raised by the Faculty(Indenter). If the Booking request is for Official Purpose, then the request should be raised by the Directors Office/ HOD's/ Deans.
Process	The request goes to GH-Office for confirmation. Requests will be confirmed depending upon the availability. For Booking requests on payment basis, If payment is done from the R&D Project fund, the request should go to the R & D Office for approval. After approval it goes to the next step. If payment is done from the Department fund, the request should go to HOD for approval. After approval it goes to the next step. If Payment is made by Indenter/Visitor, request should go to next step

	After necessary approvals, if Booking is for up to 10 rooms, request goes to GH-Office. Requests will be confirmed depending upon the availability. If Booking is for more than 10 rooms, request goes to GH-Office to check availability. If the requested number of rooms are available, then the request goes to Dean(Admin) for necessary approval. After Dean(Admin) approval, request goes to GH-Office for confirmation
Output	Intender has to be informed about the status of the booking.
Interface	
Workflow management	Flow chart is attached as an image under Attachments. Title: **Flow Chart for Guest House Booking**
Remarks	

Attachments:

Guest House Booking Form:

Visitor's & Booking details (A valid Proof ID/Address is mandatory – to be submitted at the time of Check in)

Name		Organization	
Address		Nationality	

Phone/Mob./E-mail		Purpose of visit	
No. of persons		Age & Relationship (In case of Alumni)	
No. of Rooms		Type of Rooms	Single Shared

Arrival		Departure	
Date:	Time:	Date:	Time:

Bills to be settled by

Visitor	Indenter	Project No	Department

Indenters profile

Name		Designation	
Emp Id		Department	
Phone		Signature	
E-mail		HOD/Competent Authority forwarding	

Approvals

Certified that the bill be charged directly from Project A/c	Certified that the bill be paid by DR(F&A) from the department budget	Approved as Institute guest:
Project coordinator	Head of the Department	**Dean/ Head of the Department**

Flow Chart for Guest House Booking
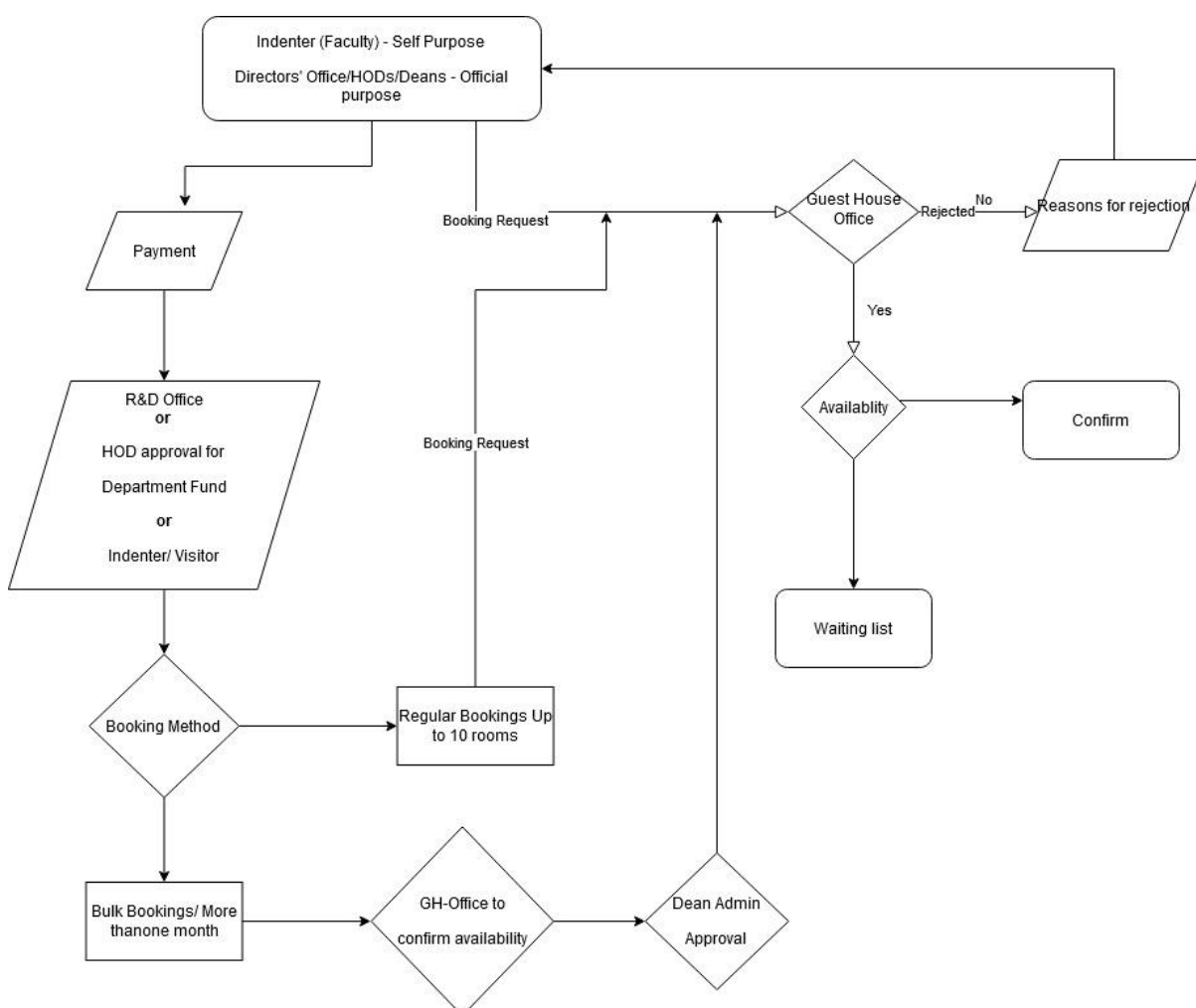
Module Name: Hospital Management HMIS (Other module)

Sub Module: Registration module

Input	Name of patient, ID No, Age/Sex In case of private patient's provision to capture the master data (including Photo) during registration should be available. And provision for generation of Bills on confirmation of providing treatment
Process	Provision of Online portal on IITH Intranet for taking prior appointment with the doctor. The time slots can be auto generated based on the availability of the doctor or the patient can select the specific time slot if it is free. There should be provision for On spot or Walk-In appointment at IIT Hospital Registration Counter - Emergency counter registration
Output	Provision for generation of Registration Slip on re-confirmation by the patient at the IITH registration counter on the date of appointment, based on which the final schedule will be published in Doctors OPD chamber.

Interface	● Provision to block appointments based on emergency schedules and surgery schedules and non-availability of the concerned doctor. ● The web module should have GUI based time slot selection. The web login available for patients should not be considered for user license, unlimited users can access the web portal.
Workflow management	● Provision for transfer/ re-scheduling or cancellation scheduled appointments. ● System should have facility to move the old appointment to archive and purge the cancellation records. The retention policy should be definable by the administrator.
Remarks	Extensive user customized queries(search criteria) and reports

Sub Module: Diagnosis and Prescription module

Input	Diagnosis/disease profile template creation by the doctor for recording their patient's symptoms/complaints.
Process	Entry of Symptoms or complaints should be user friendly preferably based on list of values(LOV) and additional notes (free text) entry.

Output	- Summary and link of Last visit diagnosis to be available in the diagnosis entry screen. - Generation of clinical statistics on various parameters. - Recording of Doctor's provisional diagnosis & final diagnosis - Prescribe drugs, doses, duration from available drugs master - Facility to maintain, entry, view, update medical information such as allergies,history,high risk etc. - Alerts on drug conflict management (based on Drug Intelligent database such as MIMS, SIMS which gets updated on periodic basis) and patient specific allergy based on patient's history
Interface	- Alerts on drug conflict management (based on Drug Intelligent database such as MIMS, SIMS which gets updated on periodic basis) and patient specific allergy based on patient's history
Workflow management	- Entry and monitoring of Treatment Plan - The doctor's medical and lab test prescription should automatically trigger request to internal pharmacy and labs Schedule future appointments, Prescribe LAB tests - Refer to other IITH doctors or Referral Hospitals, Recommend patient for Admission
Remarks	System should provide extensive user customized queries(search criteria) and reports

Sub Module: Inpatient module

Input	Advice for admission as in patient will be triggered from OPD or emergency Diagnosis and prescription mgmt system In case of Private patient, generation of bills
Process	● Wards/ Rooms/ Beds allocation based on entitlement ● Transfer of patient between wards and beds ● Generation and printing of admission form (case sheet)
Output	● Automatic/ Manual preparation of discharge summary/ Death records ● Automatic bed release on exit of patient ● Patient feedback and suggestion system Capturing and monitoring ● System should facilitate booking of follow-up appointment at the time of discharge entry ● System should not allow any further transaction after the discharge except on authorization ● If patient is discharged due to death the system should mark the patient as deceased in the medical records and no further transaction should be allowed
Interface	Provision for nurse station - Nurse pharmacy mgmt- Linen Mgmt- Equipment sterilization schedules and hygiene mgmt- Ward/ Toilets/Bed cleaning schedule- Patient Diet mgmt- Lab/Radiology mgmt.

Workflow management	• Provision to capture basic information such as height, weight, genetic marks and blood group etc. Capturing of BP, Pulse, Temperature etc., as per the schedule on periodic basis. • Provision to capture diet chart. • Alerts for nurses for monitoring the vital body parameter, diet management & medicine as per the doctor's prescription. • Updating of patient progress on periodic basis. • Updating of Doctor's visit and read vise and provision to reschedule the treatment plan • Provision for inter departmental consultation and raising referral request for doctors, Labs and other hospitals
Remarks	System should provide extensive user customised queries (search criteria) and reports

Sub Module: Pharmacy module

Input	The stores management includes planning, purchase, receiving and storing
Process	The software should have provision to transfer the stock to multiple pharmacy through the stock transfer from IFS-ERP system to pharmacy management system of HMIS on real time basis. The data of IFS-ERP will be stored in different Oracle schema and HMIS Data Base will be in the same Oracle Installation on different schema or other Data Base of HMIS. The implementer should configure required migration procedure using ETL tools along with IITH IT team.

Output	- Provision for capturing the desired medicines from the report of Drug committee with the facility for planning the requirement on a staggered delivery. Provision for migration of the material planning data from HMIS to IFS-ERP. - Provision for handling multiple pharmacy, multiple distribution points in the same pharmacy, nursing pharmacy etc. - Provision for storing the Bin Location in the pharmacy, re-order level, triggering of alert on qty less than re-order level. - Pharmacological classifications (Anatomical/therapeutic/chemical (ATC) grouping. - Provision to capture/store standard trade and generic names and dosage details
Interface	Monitoring of expiry dates & Reminders for disposing off expiry drugs back to the supplier in advance or Provision for removal of expired items
Workflow management	- Issue of drugs as per Doctor's Prescription which should automatically flow from Prescription Management module. - Automatic checking and warning on drug interactions/patient allergies in patient prescription - Provision to support alternative drug suggestion - Updating of Inventory Stock online on any stores transaction. - Provision for authorization by supervisor before controlled drugs can be issued - Provision for entering CST/DL/VAT Number to enter sales tax, central sales tax and drug license number.
Remarks	- Provision for entering CST/DL/VAT Number to enter sales tax, central sales tax and drug license number. - Patient billing and printing of slips for Private employees as per billing rules defined in system by admin user

Sub Module: Pathology module

Input	The complete scope of work covered by the facility management and scheduling should be available for the facility in pathology units
Process	- All the results should be published on IITH-Intranet web portal. Online unlimited web user access to GUI for downloading his/her test results after user authentication - Provision for sending or referring pathology test to outside Lab and updating of the result back to HMIS. Traceability lines for samples through-out its flow (send to outside laboratories) with facility to record date/time and name of individual who ordered test, collected the sample and released/verified the test results - Provision of printing of barcoded sticker with registration number and the patient test required for sticking on the sample containers.
Output	All the results should be published on IITH-Intranet web portal. Online unlimited web user access to GUI for downloading his/her test results after user authentication
Interface	
Workflow management	- Phlebotomy for Outpatients and Inpatients and plan for visits of Phlebotomist to wards with proper work lists - Provision for maintaining history log
Remarks	System should provide extensive user customized queries(search criteria) and reports

Sub Module: Radiology module

Input	The complete scope of work covered by the facility management and scheduling should be available for the facility in pathology units
Process	- Provision for digitization of Radiology reports and centralized storage using Document Management Solution is desirable - Point of use stores for films & consumables management in the Radiology department. - Provision to handle multiple radiology units.
Output	Provision for entry of Interpretation of the results and findings by the specialist.
Interface	
Workflow management	
Remarks	System should provide extensive user customized queries(search criteria) and reports

Sub Module: Referral module

Input	Advice for referral will be triggered from OPD / emergency /In-patient prescription mgmt. system
Process	Provision to extract the Patient history from HMIS and upload the same on Internet module of Referral Mgmt.

Output	
Interface	● Submission of Invoice for Competent Authority approval ● entry on Payment Status ● Consolidated Payment Status hospital wise acknowledged to Referred Hospitals
Workflow management	● Provision for updating of Admission, treatment plan, cost estimate, no. of Days of treatment online by Referred Hospitals ● Uploading/Updating of Discharge summary and Invoices for payment by Referred Hospitals ● Request and Approval for extension of Referral Duration ● Approval of follow-up treatment ● Integration/Updation/Migration of Patient Treatment History in HMIS(on Intranet)
Remarks	System should provide extensive user customized queries (search criteria) and reports

Sub Module: Accounts and Billing

Input	● Financial accounting for all the transaction should be automatically done. Provision for defining the Visit Charge / Man Hour rate for various specialist should be available. The rate of material purchase should be migrated from the purchase module of IFS-ERP.

Process	• Comprehensive real-time tracking of all patients charges from point of registration to discharge (includes medicines/tests etc) • Ability to change items rate/Procedures /Tests not in standards rate list and facility to incorporate the same in standard rate list if required. • Facility to grade list of items/procedures/tests based on frequency of use. • Billing should support for multiple cashier stations, printed interim and final bills, and payment receipt to patients. • Facility to provide discounts/waive off part/full bill amount based on approvals/Category of patient. • Facility for off-line billing from manual records.
Output	• Ability to maintain and track advance collection, refunds etc • Ability to print consolidated bill/Invoice or a detailed invoice. This feature should be controlled by the administrator. • Ability to make the changed charges/tariff for all the services or selected services to become effective from a target date
Interface	
Workflow management	• Cash management for different cash collection centers. • Provision for generation of ledgers
Remarks	System should provide extensive user customized queries(search criteria) and reports

Module Name: Invitees who are visiting IITH Visiting Faculty Module (Core module)

Input	1. Name of visiting Faculty 2. Host Department name 3. Host Faculty 4. Date of Arrival 5. Duration of Stay 6. Travel Support (local/domestic/international) 7. Mode of Support (Project/RDF)
Process	1. Approval of HoD & Director is needed if no support from Project/RDF (or) 2. No approval required if support is from Project/RDF 3. A request will be sent to Guesthouse after approval.
Output	1. Confirmation mail to host and guest house regarding the arrival date, duration along with the details of the visitor.
Interface	1. Finance and Accounts Module- Honorarium related 2. Classroom reservation Module 3. Grade Submission Module
Workflow Management	Host Faculty provides information ☐ HoD / Director Approval ☐ Guest House Booking ☐ confirmation Mail to Host Faculty
Remarks	1. Solution should simplify the workflow of inviting a Guest 2. Easy to book room for Guest 3. Complaint monitoring mechanism

Module Name: Computer Centre Portal (Other module)

Input	This portal needs to get information updated in several modules to provide IT services to Students, Faculty and Staff.
	Any inventory update in Stores Inventory Management which belongs to the Computer Centre needs to get updated in a separate tab.
Process	It needs to have multiple tabs with the services Mail Server, WiFi server and LDAP server.
	Within those tabs, it should contain Listing of Groups.
	Students → Registered, Graduated
	Faculty → Regular, Nonregular
	Staff → Permanent, Project, Research
	This contains API calls to various other services Email server, LDAP Server & Wifi Account creation.
	This should contact the API calls using the authorization keys of individual employees for various tasks.
	Asset Management:
	Assets updated in Stores Inventory, need to be enabled here for usage details update. (Eg: item allocated to __, item installed at __, item condition __ and etc)
	Any item's warranty is approaching, it should update the user before 45 days to communicate with Stores
	This information needs to be visible (not editable) to the Stores department.
Output	Whenever a task is completed, it should reflect the change to the respective parent Module.

	Eg: When a user account is created for students, it should update in Academic Module, that the Email, WiFi & LDAP accounts are created and same procedure for the remaining Faculty and Staff joins.
Interface	This portal needs to communicate with other servers via APIs provided by the Computer Centre. A centralized monitoring system is needed to observe the usage statistics of all the ERP modules on a daily basis. It also needs to have filtering for several options(such as , high usage of resources in a day, week, month etc.)
Workflow management	User's (Student,Faculty & Staff) parent portal → Respective page for updating information.
Remarks	

Modules under Dean R&D (Core module)

Module name: R&D Projects Module (Core module)

Input	1. Creation of Grant-in-aid Sponsored and Consultancy Projects information with specified fields such as Manpower, Contingency, Travel, Consumable, Equipment, Miscellaneous, Interest and Other Heads etc.
Process	1. After the Project gets sanctioned, R&D section creates the Project with all the heads specified by the funding agency.
	2. The receipt will be entered in respective Projects.
	3. There should be a provision in the ERP to commit the funds for all the purchases / advances from different Projects under different heads.
	4. There should also be a provision to make the payments against the commitments.
	5. There should be a provision in ERP for HRMS module for Project staff which includes commitment, offer, extension, payments, completion, relieving and termination and experience certificate and NOC etc.
	6. Integration with PFMS website.
	7. Retrieval of expenditures made from PFMS website for automatic uploading expenditure in ERP Module.
	8. Provision for raising Invoices in connection with Sponsored & Consultancy Projects. Automatic ledger of Invoices for generation of statement every month in the GST website.
	9. Provision for maintaining Ledgers of SRC, DDF, RDF, Fixed Deposits based on the input data.
	10. Automatic statutory deductions of TDS GST, TDS (with defined percentage) and provision of ledger every month in respect of payments, salaries and honorariums.
	11. Provision for generation of payment vouchers after entering the data in ERP module.
	12. Provision to include UTR No. for the transactions against each payment in ERP Module.
	13. Email / SMS alerts to the beneficiaries / vendors after making the payments.
	14. Provision for making settlement of advances in ERP.
	15. Provision for fund transfer from Projects to RDF.
	16. Provision for fund distribution among various available Projects and its sub-heads from the uploaded bank statement's receipts.
	17. All the above modules/ interface/ fields should be flexible for modification / alteration / retrenching / addition and for easy integration with other sections data viz. purchase, stores, academic modules.

Output	1. Provision for automatic generation of Utilization Certificate and Statement of Expenditure as per the standard formats with all budget heads, receipts, payments financial year wise. 2. Project wise pay-roll process, reports and attendance. 3. Provision to all the Faculty to see the Project on-line. 4. Provision for Bank Reconciliation Statement.
Interface	1. Provision for Funds status with Budget Heads, Receipts, Payments and as per financial year wise. 2. Provision for Utilization Certificate as per GFR-12A format and other standard formats. 3. Provision for consolidated receipts and payments with Name of the Project, opening balance and closing balance etc. 4. Committed JV can be created as optional for internal reporting purposes. 5. Project wise cost center with trial balance and balance sheet. 6. Provision for Schedule-3A format for Annual Accounts. 7. Provision for change of percentage for Overhead distribution. 8. Provision for master data base for Faculty, Staff and Students of the account numbers. Account number should be retrieved automatically.
Workflow Management	Purchase Commitments : Stores → R&D for Commitment → DA → AR → Dean (R&D) → Stores for release of PO → Invoice → Stores entry → R&D for Payment. Payment : DA → AR → JR (R&D) → DDO / Registrar Manpower : User Faculty → R&D DA → AR → Dean (R&D) - Admin / Academic → Payment of salary / Fellowship. UC and SOE : User Faulty Request → DA → AR → PI → JR (R&D).
Remarks	1. Project expenditure should not be booked after closure of the Project. 2. In addition to the above, there are some Projects viz., UAY, Imprint where in funds come from different sources i.e., Ministry, MHRD and Industry. There should be a provision to book receipts and expenditure separately in respect of the funding agencies.

Equipment IRG module (Core module)

Input	A list of equipment will be given. Each equipment will be having an In-Charge and/or an administrator. All the equipment will have different price ranges.
Process	- Equipment is allowed to be booked by Students and Faculty - Each equipment is having time slots and various levels of prices. - Students requests will follow an approval of Guide and Faculty/admin of equipment. - Approved equipment will be reserved for the particular requestee.
Output	Provision for sending advance notice to use the equipment. Provision to override the booking status equipment, based on the price/authorization levels.
Interface	
Workflow management	Student/Faculty → Equipment → Approving authority
Remarks	System should provide extensive user customized queries(search criteria) and reports

Modules under Dean Academic (Core module)

Module Name: Academic Module (Core module)

The following should be taken care while designing the academic modules.

- Drill down reports and exception reports needed for all modules for different users
- Alerts based on calendar and activities (system alerts/ mail alerts/ sms alerts/ phone alerts) to be enabled
- Escalation chain with turn around time for all activities to be integrated along with Auto submission facility
- Masters in terms of all parameters and criteria to be available so as to add/ modify or remove fields from time to time
- Extreme flexibility needed for workflow and inputs
- System Validation checks to be enabled wherever needed
- Demo training- Physical training and training materials has to be provided and video lectures to be provided
- All kinds of data analytics statistical analytics including graphical representation
- For all modules provision for exceptional handling must be provided with a provision for approvals from different channels
- Flexibility of approval chain with different channels (Ex:- Tier 1> Tier 2> Tier 3> Tier 4 (or) Tier 1>Tier 3> Tier 5)
- Different view and user options at different levels
- AIMS data and offline data integration with ERP
- Data retrieval from archives to be smooth and easy

Sub Module 1: FAQs for Students

Input	FAQs, Academic rules, Senate minutes and office procedures etc.
Process	Upload files- word, PDF, etc
Output	To view Academic rules, Senate minutes and office procedures
Interface	Students, Faculty and Academic Staff
Workflow Management	
Remarks	

Sub Module 2 : Admissions- UG (BTech/ BDes Programs)

Input	1. List of admitted students and hard copies of Personal Data Forms received from JEE and UCEED. 2. Additional information as required*, collected from students. 3. Fee Structure to be uploaded- Fields required such as Seat acceptance fees and balance amount (category wise) to be collected
Process	1. Lists (B Tech and B Des) to be made available to Hostel Management for hostel room allocation.

	2. Student category-wise fee structure and final student list to be made available to Finance & Accounts for fee collection.
	3. Calculate mean, median and mode of JEE(Adv) and UCEED ranks of admitted students
Output	1. Admissions status
	2. Gender-wise, Category-wise (Discipline, SC/ST, Minority community, Below/Above BPL, Rural/urban) list of (B Tech and B Des) students
	3. Updated student profile of students appearing in the final list
	4. Report on mean, median and mode of JEE(Adv) and UCEED ranks of admitted students for authorized access
	5. Drill down reports wrt admissions
Interface	1. Finance & Accounts module for fee collection, issue of fee receipt.
	2. Registration sub-module for enrolling admitted students into prescribed/selected courses.
	3. Student Management Sub-module
Workflow Management	1. student data received from JEE office and additional data collected directly from students should be captured by the system
Remarks	

*Admission demographic information not available in Personal Data Form received from JEE office but required by various internal users (e.g., Educational background of parents, Blood Group of students) as well as to reply to queries from government depts., RTI queries etc. (e.g., Male/Female, Rural/Urban background, BPL/Non-BPL family, Minority/NonMinority community).

Sub Module 3 : Admissions - MSc

Input	1. Integration of data received from JAM organizing Institute
	2. List of admitted students received from JAM.
	3. Additional information as required, collected from students.
	4. Fee Structure to be uploaded - Fields required such as Seat acceptance fees and balance amount (category wise) to be collected
Process	1. Lists to be made available to Hostel Management for hostel room allocation.
	2. Student category-wise fee structure and final student list to be made available to Finance & Accounts for fee collection
Output	1. Admissions status
	2. Gender-wise, Category-wise (Discipline, Gen-EWS/ OBC, PwD, SC/ST, Minority community, Below/Above BPL, Rural/urban) list of students
	3. Updated student profile of students appearing in the final list
	4. Drill down reports (as per sl.no 2)

Interface	1. Finance & Accounts module for fee collection, issue of fee receipt.
	2. Registration sub-module for enrolling admitted students into prescribed/selected courses.
Workflow Management	1. Student data received from the JAM office and additional data collected directly from students should be captured by the system
	2. Based on fees paid and upload of certificates final list to be generated
Remarks	

Sub Module 4 : Admissions - MDes, MA, M Tech and PhD (Regular admissions)

Input	1. Types of programs (M Des/ MA/ M Tech/ PhD)
	2. Eligibility criteria will be different from program to program wrt the qualifying examination and 2-3 parameters (GATE rank/ CEED rank)
	3. Application form online for each program
	4. Integration of data received from departments (eligibility criteria)
	5. Fee Structure to be uploaded- Fields required such as Seat acceptance fees and balance amount (category wise) to be collected
	6. Offers accepted by the selected candidates
Process	1. Dept. wise/ program wise intake to be fixed on some parameters and formula - number of seats to be fixed
	2. Whenever there is an advertisement made in Website, ERP Admissions Module has to be enabled and the student should be able to apply for admission in ERP.
	3. Record and track applications received
	4. Respond to queries received online and offline about the programs
	5. Periodically update FAQs relating to the programs, made available on the website.
	6. Schedule and communicate selection process and dates to applicants and Selection Panel.
	7. All the applications have to be received by the respective department HOD/ faculty in charge.
	8. Verify documents - The dept. should be able to shortlist based on some filters/ criteria (eligibility criteria)
	9. Conduct selection process - The department will conduct written examinations and /interviews and finalise the suitable candidates. In case of selection by GATE score, the flow chart given at the end of this module has to be followed. The offers have to be sent to the students via email.
	10. Admission approval process - Approval chain for final selected candidates
	11. Declare results
	12. Make available list of admitted students to the academics office for initiating the registration process.

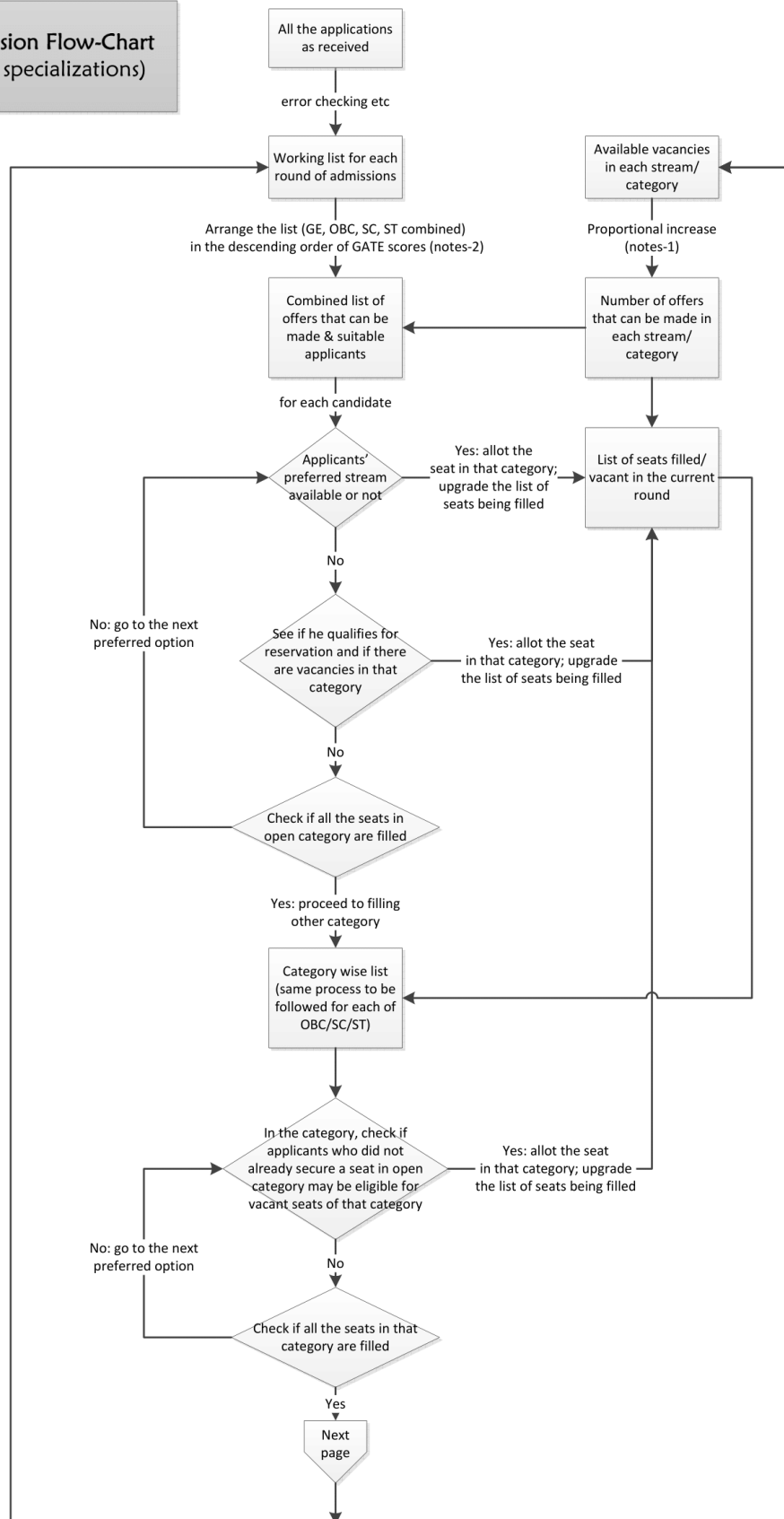|	13. Offer letters have to be sent to selected candidates.
	14. Acceptance/decline of admission by students to be received by the respective departments with a copy to Acad section
	15. Information from application to be captured in the student profile.
Output	Offer letter should be sent to the selected candidates. Reports such as:
	1. Record and track of applications received.
	2. Schedule of selection processes, evaluation report.
	3. List of selected students.
	4. List of students in the waiting list.
	5. List of students who have been admitted.
	6. Gender-wise, Category-wise (Discipline, SC/ST, Minority community, Below/Above BPL, Rural/urban) list of students Updated student profile of students appearing in the final list
	7. Result communication (with specified viewership rights)
	8. Drill down reports wrt admissions
Interface	1. Make available list of admitted students and category-wise fee structure to Finance & Accounts for fee collection and issue of fee receipt.
	2. Registration sub-module for enrolling admitted students into prescribed/selected courses
	3. Faculty Incharge and HoD office.
	4. Registration sub-module for enrolling admitted students into prescribed/selected courses
	5. Student Information Management sub-module
	6. Dept. (Faculty/ DUGC/HoD) interface for convening selection panel meeting and conducting selection process
	7. Documents Management for archiving documents relating to selection process
	8. Hostel office interface
Workflow Management	Student data should be captured by the system Dept. : Faculty>HOD> Acad office : Dealing Assistant(A.P)> SO(A.P)> Assistant Registrar(A.P)> Deputy Registrar(A.P)> Dean(A.P)> Director
Remarks	Solution should be flexible to handle many variations in admission process of PG and Ph.D program (e.g., Start Early program, Program for external, sponsored candidates, Project based program, QIP, ASEAN, DRDO, Joint doctoral program, ICCR entry, SII and so on); similarly there are variations of M.Tech program (Regular 2 year. program, 3-year program, Part-time program, 1 year specific program etc.).

MTech Admission Flow-Chart
(for multiple specializations)

All the applications as received

error checking etc

Working list for each round of admissions

Available vacancies in each stream/ category

Arrange the list (GE, OBC, SC, ST combined) in the descending order of GATE scores (notes-2)

Proportional increase (notes-1)

Combined list of offers that can be made & suitable applicants

Number of offers that can be made in each stream/ category

for each candidate

Applicants' preferred stream available or not

Yes: allot the seat in that category; upgrade the list of seats being filled

List of seats filled/ vacant in the current round

No

No: go to the next preferred option

See if he qualifies for reservation and if there are vacancies in that category

Yes: allot the seat in that category; upgrade the list of seats being filled

No

Check if all the seats in open category are filled

Yes: proceed to filling other category

Category wise list (same process to be followed for each of OBC/SC/ST)

In the category, check if applicants who did not already secure a seat in open category may be eligible for vacant seats of that category

Yes: allot the seat in that category; upgrade the list of seats being filled

No: go to the next preferred option

No

Check if all the seats in that category are filled

Yes

Next page

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                              ┌────────────┐
                              │  Previous  │
                              │    page    │
                              └──────┬─────┘
                                     │ Yes
                              ┌──────┴─────┐
                              │ All vacancies filled │
                              └──────┬─────┘
                                     │
                           ┌─────────┴────────┐
                           │ Consolidated list of │
                           │  offers to be made   │
                           └─────────┬────────┘
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```

Retain applicants name in the list of applicants and consider him in further rounds

All vacancies filled

Consolidated list of offers to be made

Candidate responds to the offer letter — No → **Out of the list; not considered for any further rounds**

Yes

Accepts/rejects

- Rejects, but requests for upgrade/to-be-considered for future rounds
- Rejects without any request for upgrade
- Accepts (also gives the GATE score card & fees)

Allot the seat to the applicant, but also retain him the master list of eligible applicants ← Yes — **Requests for upgrade** — No → **Fill/freeze that seat with the applicant; upgrade the master list of vacancies**

Keep track of the applicants who have withdrawn their earlier acceptance and modify the master list of vacancies accordingly

After the lapse of due date, go for the next round of applications following the same procedure

Notes:

1. Proportional increase of the number of offers to be sent (eg: in the beginning rounds, if there are 2 vacancies in a category, you may send 3 offer letters to account for rejections/dropping etc.). This is discretionary in nature and has to be carried out after an estimate of chances of acceptance/rejection for that round.
2. If the GATE score of two applicants is same, BE/BTech percentage may be used as a tie-breaker

Sub Module 5 : Admissions - PhD rolling

Input	1. Integration of data received from departments (eligibility criteria) 2. Fee Structure to be uploaded- Fields required such as Seat acceptance fees and balance amount (category wise) to be collected
Process	1. Available throughout the year for students to apply 2. Record and track applications received 3. Respond to queries received online and offline about the programs 4. Periodically update FAQs relating to the program, made available on the website. 5. Schedule and communicate selection process and dates to applicants and Selection Panel. 6. All the applications have to be received by the respective department HOD/ faculty in charge. 7. Verify documents - The dept. should be able to shortlist based on some filters/ criteria (eligibility criteria) 8. Conduct selection process - The department will conduct written examinations and /interviews and finalise the suitable candidates. 9. Admission approval process - Approval chain for final selected candidates 10. Declare results 11. Make available list of admitted students to the academics office for initiating the registration process. 12. Offer letters have to be sent to selected candidates. 13. Acceptance/decline of admission by students to be received by the respective departments with a copy to Acad section 14. Information from application to be captured in the student profile.
Output	1. Record and track of applications received 2. Schedule of selection processes, evaluation report. 3. List of selected students. 4. List of students in the waiting list. 5. List of students who have been admitted. 6. Gender-wise, Category-wise (Discipline, SC/ST, Minority community, Below/Above BPL, Rural/urban) list of students Updated student profile of students appearing in the final list 7. Result communication (with specified viewership rights) 8. Drill down reports wrt admissions
Interface	1. Make available list of admitted students and category-wise fee structure to Finance & Accounts for fee collection and issue of fee receipt. 2. Registration sub-module for enrolling admitted students into prescribed/selected courses 3. Faculty Incharge and HoD office.

	4. Registration sub-module for enrolling admitted students into prescribed/selected courses 5. Student Information Management sub-module 6. Dept. (Facultyincharge/HoD) interface for convening selection panel meeting and conducting selection process 7. Documents Management for archiving documents relating to selection process 8. Hostel office interface
Workflow Management	Student data should be captured by the system Dept. : Faculty>HOD> Acad office : Dealing Assistant(A.P)> SO(A.P)> Assistant Registrar(A.P)> Deputy Registrar(A.P)> Dean(A.P)> Director
Remarks	Solutions should be flexible to handle many variations in the admission process of Ph.D program (e.g., Start Early program, Program for external, sponsored candidates, Project based program and so on); similarly there are variations of funding agency etc.).

Sub Module 6: Student Registration

Input	1. List of students eligible for registration 2. Selected students details and some basic fields such as email ID to be entered by a dealing assistant and accordingly student credentials to be generated and shared with students. 3. Then with the credentials, students can log in and fill Personal Details such as Qualification, Address, Nationality, etc. 4. This is allowed one time and on request if needed specifically 5. Students make the final payment (balance amount) through SBI collect to confirm and join.
Process	1. Students are allowed to fill the requested fields before the registration date by informing them over email and they need to upload certificates and advance fee payment receipt. 2. On the date of joining, students need to pay remaining fees, the Dealing Assistant (A.P) will verify the uploaded original certificates and fee receipt (online) and transfer it to officials as shown below for approvals. 3. a. Assistant Registrar (A.P) b. Deputy Registrar (A.P) 4. If information/ document submission is pending from student then reminder to be sent to the student and dealing assistant. 5. Once registration is completed, Roll no. to be generated.

	6. The roll number needs to be updated in a page of the Computer Centre portal. along with email ID and Internet credentials. There is a unique roll number pattern - can be assigned by the system based on the formula

Output	1. Dashboard with Students details for viewing various drill down and exception reports such as
	  a. Filled in registration forms.
	  b. Registered Student's list program wise, Branch wise, Category wise, Gender wise, Location wise etc.
	  c. List of students not registered with reasons, list of students dropped out of program, leave granted for semester,
	  d. Report on late registrations, exemptions, late fee collected

Interface	Once student is registered then 1. Student information management module 2. Hostel office module- To allocate Hostel rooms to Students. 3. Computer Centre- To allocate email ids, Wifi Credentials etc. 4. ID Card Department- to print student ID cards of students. 5. Depts. - To view and plan activities 6.Finance and Accounts Section- To view Fee Payment status.
Workflow Management	1. Student ☐Dealing Assistant (A.P) ☐Assistant Registrar (A.P)☐Deputy Registrar (A.P) 2. Id card Dept 3. Hostel dept 4. Computer Centre
Remarks	This module is needed for all programs - B.Tech/M.Tech/Ph.D/M.Sc/Post Doc.

Sub Module 7 : Student Information Management

Input	1. Personal Data File of students. 2. Various Certificates uploaded by students 3. Results of entrance exams(Type of Exam). 4. Courses for which are registered. 5. Specialization (M.Tech & Ph.D. students) 6. Course grades of completed semesters. 7. Program conversions- Dual degree details. 8. Conferences attended, Financial assistance, Papers published. 9. Awards received. 10. Internship projects, research projects, community engagements, participation and achievements in sports and cultural activities, scholarships, merit and appreciation certificates received, hostel details. 11. Fellowship and HRA claimed. 12. Dues from any section. 13. Another tab named Computer Centre which will accommodate the links to Support Centre, WiFi Reset, LDAP Reset pages'.

Process	1. Generation and continuous updating of student database for monitoring the complete student life cycle
Output	1. Student database with all relevant information about students. 2. For PG students, the database should capture information about fellowships and grants, supervisor details, doctoral advisory committee, examiners, research projects worked on, research papers published/presented, patents generated, etc. 3. Timely alerts to student/faculty and academic staff at various stages based on Academic Calendar
Interface	● Admission sub-module ● Registration sub-module ● Course Management sub-module ● Alumni relations module ● Finance and Accounts Module- To view Fee Payment status. ● Hostel office module- To allocate Hostel rooms to Students. ● Placement module ● Computer Centre- To allocate email ids, Wifi Credentials etc. ● ID Card Department- to print student ID cards of students. ● Depts. - for various academic updates and activities of student lifecycle
Workflow Management	Student ☐Dealing Assistant (A.P) ☐Assistant Registrar (A.P)☐Deputy Registrar (A.P)> Dean
Remarks	Solution should provide: 1. Dashboards for admission demographics, student performance record 2. Ability to migrate data to Placement/ alumni database 3. Student Information Management should be the single source of reference for all clearances and 'No dues' to be obtained by students at any point of time.

Sub Module 8 : Course Registration and Management.

Input	1. Program-wise and semester-wise list of courses offered along with mapping of some with specific pre-requisite courses and grades in those courses
	2. Classification of courses - Department core, electives, additionals, Audit courses, LA/CA etc. and mapping
	3. Timetable Slots
	4. Faculty advisors/ course instructors List and mapping with courses
	5. Program regulations
	6. Academic calendar, examinations calendar
	7. Course mapping with - Infrastructure available in terms of classrooms, labs, seminar rooms, conference rooms, etc
	8. Form to add/drop course
	9. Fee payment status
	10. Approval of faculty advisor
	11. Attendance of students course wise - biometric mapping
Process	● Faculty course allocation
	● Student allocation to sections
	● Attendance sheets
	● Course time tables and exam time tables given the scheduling constraints including classroom allocation
	● Conducting online and offline exams/quizzes
	● Students submit online registration form approved by Faculty Advisor within the stipulated time and Fee Paid details
	● Allow students to Add/drop options within specified deadlines
	● Update registration records for additions and deletions of courses -Approval process for course overload/reduced load
	● Approval for late registration by Dean of Academic Affairs

Output	1. Faculty-wise, course-wise and program-wise course allocation schedules 2. Time tables for lectures, tutorials and lab sessions 3. Exam time tables, exam seating plans 4. Student feedback reports 5. Student database with all relevant information about students. 6. Alerts to students at various stages. List of dropped courses Revised registration status after adding/dropping courses
Interface	1. Registration submodule 2. Student Information Management sub module 3. Result management sub module 4. Student course feedback sub module 5. Accounts Module- Only after Fees payment (after confirmation of Accounts Section) Course registration can be done by the student.
Workflow Management	Student ☐Dealing Assistant (A.P) ☐Assistant Registrar (A.P)☐Deputy Registrar (A.P) Id card Dept Hostel dept Computer Centre
Remarks	● Proposed solution should integrate with biometric/smartcard system which will be used for recording student attendance ● Registration of courses module - Semester wise (Should have a list of courses, pre-requisites, credits, time slots, course types, segments etc.) ● Pre- Registration module- Should have the list of courses, credits, time slots, course types, segments etc.

	• For Phd students registration for courses is required only till course work is completed. However, academic registration is required every semester like all other students. • Drill down and exception reports for different users

Sub Module 9 : Examination Management

Input	1. Quizzes 2. Assignments 3. Exam Schedule- Segment wise, Mid semester exam, End Semester, Supplementary, Summer Term, Winter Term, etc. 4. Exam Question Papers etc.
Process	All the requests made by faculty related to examination would be recorded in this module. Confirmation email facilities should be available.
Output	Various reports based on the inputs received..
Interface	Course Management Module Faculty Module
Workflow Management	Faculty> Dealing Assistant(A.P)
Remarks	Various reports based on the inputs and outputs required

Sub Module 10: Results Management

Input	Grade submissions by faculty for each evaluation component, for each course, each program
Process	• DUGC (committee) of each department certifies whether a student is eligible for minors, Honors, Double Major, Double Degree based on CGPA and backlogs; • Registration of additional credits based on CGPA • List of PhD students whose CGPA is less than specified number • List of PG students with more than or equal to a specified grade • Semester-wise compilation of grades and calculation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (SGPA) • Online Generation and printing of grade sheets/ transcripts for each semester • Online Generation and printing of Consolidated Grade Report, Provisional and original degree certificate at the end of the program
Output	• Online Grade sheets, Transcripts and Consolidated Grade Reports,Provisional and original degree certificate at the end of the program • SGPA and CGPA distribution including graphical presentation • No. of backlogs students • List of graduating students • List of students terminated from the program

	● Various drill down reports
Interface	● Faculty Request - Grades upload and Grade change module ● Course Management Module ● Student Information Management Module ● Placement module ● No Dues module for final issue of certificates
Workflow Management	
Remarks	Faculty Advisor DUGC/ DPGC/ HoD should be able to view the grades, SGPA and CGPA

Sub Module 11: Student Duplicate ID Card

Input	1. Student to fill request form by feeding his roll no.
Process	1. Fine amount to be paid through SBI collect and upload the required documents 2. Dealing Assistant (A.P) will verify the uploaded documents and forward for approval to SO / Assistant Registrar (A.P) then to Deputy Registrar (A.P). 3. Once approved it is sent to the ID card Dept.
Output	1. Student ID cards will be given by the ID Card department.
Interface	1. Payment Gateway or Finance and Accounts Module ? 2. ID Card Printing Department.
Workflow Management	Student ☐Dealing Assistant (A.P) ☐SO☐Assistant Registrar (A.P) ☐ Deputy Registrar (A.P) Sent to Id card Dept
Remarks	-

Sub Module 12: Student Certificates

Input	Templates for all kinds of forms to be available 1. All Types of Bonafide Certificates 2. NOCs 3. Expected Graduation certificate 4. Course Completion certificate 5. Thesis submission certificate/ Viva Completion Certificate 6. Provisional 7. Migration 8. Degree Certificate 9. Duplicate Degree Certificate 10. Teaching Assistantship Certificate 11. Permission for attending conferences 12. No Dues certificate 13. Duplicate certificates with prescribed fees/charges
Process	1. Students will fill the respective form for the required certificate.

	2. Students pay necessary fees wherever applicable for obtaining the certificates and upload the fee receipt.
Output	System generated Certificate (specific formats) will be issued based on the input form on approval of DR.
Interface	Student Information Management Module Student course registration sub module
Workflow Management	Student □Dealing Assistant (A.P) □Section Officer □Assistant Registrar (A.P) □ Deputy Registrar (A.P)
Remarks	Reminder required- If not completed within the stipulated time (working days) to Dealing Assistant.

Sub Module 13: Student Fellowship

Input	1. Students will select the type of Fellowship. 2. a. Institute Fellowship(MHRD). b. Project Fellowship (R&D). c. DST Inspire and PMRF. d. CSIR Fellowship e. Others Applicable to M.Tech, Ph.D and Postdoctoral Fellows. Masters should be available for kinds of fellowships
Process	A fellowship structure wrt MHRD/ Project/others is required. (Structure contains Fellowship start date fellowship end date, amount of fellowship per month, HRA if applicable, Arrears if applicable). 1. Students from his login will be able to apply for fellowship as per his eligibility. 2. Students need to apply for fellowship within stipulated time. 3. Once a student applies for fellowship, the Faculty advisor/Mentor/Guide needs to approve it after verification. 4. If leaves have been availed in excess than permitted, then the necessary amount has to be deducted. 5. Attendance validation required based on biometric attendance 6. Academic Section will forward the list to accounts section/(CSIRor other funding agency) for disbursement of fellowship (separate format based on funding agency to be generated)
Output	Reports such as : 1. List of Students Eligible for applying fellowship. 2. List of Students who have applied. 3. List of Students to whom fellowship is disbursed. 4. List of Students to whom fellowship is to be disbursed. 5. Online filled in forms of individual bunding based fellowship applicants.

Interface	1. Departments (FA/HoD) approval 2. R & D section to enter details 3. Finance and accounts module - Fellowship payment.
Workflow Management	1. Departments (FA/HoD) approval 2. Student ☐Dealing Assistant ☐Section Officer ☐Assistant Registrar ☐ Deputy Registrar (A.P) 3. Sent to R&D / Accounts
Remarks	Reminders required- on a fixed date to the Dealing Assistant, Dept FA/Guide/ HoD for approval, Accounts staff etc.

Sub Module 14: Scholarships

Input	Students will select the eligible scholarship from the available scholarships list. Based on his enrolled programme the options to be displayed in drop box. a. **B.Tech/B.Des** i. Institute Merit Cum Means Scholarship. ii. Institute SC/ST Scholarship. iii. IFS Scholarship. iv. **Add Scholarships as and when needed** b. **M.Sc./MA** i. Institute Merit cum means scholarship. ii. Institute SC/ST Scholarship. iii **Add Scholarships as and when needed**
Process	1. Students have to submit the online application form. He/she needs to upload the supporting documents (income certificate/ ITR, caste certificate etc). 2. Dealing assistant will verify the application and forward it to higher officials for further processing based on CGPA/ merit as per criteria fixed 3. Students should be able to view the status of his application with remarks. 4. The final list of eligible students will be forwarded to accounts section for disbursement of scholarship amount.

Output	1. Approved list to be sent to Accounts section
	2. Reports such as :
	    a. List of Students who have applied.
	    b. List of Students to whom scholarship is disbursed.
	    c. List of Students to whom scholarship is to be disbursed/ rejected.

Interface	1. Dept. Approval (FA/Guide etc) 2. Finance and accounts section - verifying ITRs/ income certificate and processing Scholarship payment.
Workflow Management	1. Student □Dealing Assistant (A.P) □Section Officer □Assistant Registrar (A.P) □ Deputy Registrar (A.P) □ Dean (A.P) 2. To DR Accounts
Remarks	Reminder required - on a fixed date to stakeholders as per schedule

Sub Module 15: Student Requests

Input	Applicable to all Programs
	B. Tech.
	    1. Request to change elective type.
	    2. Request to add/change/drop additionals
	    3. Late add/drop/ registration etc
	    4. Course dropping/adding
	    5. Registration and dropping for Honors.
	    6. Registration and dropping for Minor.
	    7. Registration and dropping for Double degree.
	    8. Registration and dropping for Double major.
	    9. Branch Change.
	    10. Dual degree conversion (B.Tech- M.Tech/ B.Tech-Ph.D).
	    11. Request for Dean Academic appointment.
	    12. Others- Additional requests which can be added as and when needed
	
	M. Tech.
	    1. Request to change in elective type.
	    2. Request for change in Specialization.
	    3. Request for dual degree conversion (M.Tech- Ph.D.)
	    4. Request for change of guide.
	    5. Request for Dean Academic appointment.

	6. Others - Additional requests which can be added as and when needed
	M. Sc.
	1. Request to change in elective type.
	2. Request for dual degree conversion (M. Sc.- Ph.D.)
	3. Request for Dean Academic appointment.
	4. Others - Additional requests which can be added as and when needed
	Ph. D.
	1. Request to change in elective type.
	2. Guide/ Co guide consent form.
	3. Guide Change form.
	4. JRF to SRF conversion form
	5. Open colloquium form
	6. Comprehensive exam
	7. Ph.D. Thesis Submission
	8. Ph. D. Financial Assistance.
	9. Request for CSIR Contingency grant
	10. CSIR Annual report form
	11. Ph.D to Post Doc conversion request
	12. Others - Additional requests which can be added as and when needed
	Common to all programs student withdrawal form
Process	Student has to login into ERP and has to make a request which he needs.. The request will be forwarded to the Department Executive Assistant. Dept. EA will verify all the particulars if found correct the same will be forwarded to Academic section for approval
Output	1. The student should be able to view the status of his/her request, whether his request is approved/not approved with remarks. 2. If the request is approved then necessary changes will be made in ERP Portal.
Interface	1. Course Instructor (Where ever applicable) 2. Faculty Advisor 3. HOD
Workflow Management	Student □ Executive Assistant Dept □ Dept Faculty Advisor/ Guide/ DPGC □ HOD □ 2. Dealing Assistant (A.P) □ Assistant Registrar (A.P) □ Deputy Registrar (A.P) □ Dean (A.P)
Remarks	Reminder required- If not completed within 3 working days to Dealing Assistant. Escalation channel with turn around time

Sub Module 16: Student Casual Leave/ Medical leave- Request

Input	All Programs (For B Tech only Medical leave))

Process	Once the student makes a request, it will be forwarded to the Faculty Advisor/ Guide/Mentor. The competent authority may approve/disapprove the request made by the student.
Output	Students , Faculty incharge and Academic Section should be able to view their Leave History. Total no. of leaves eligible : No. of Leaves availed: No. of Leaves balance in leave account:
Interface	Guide /HOD.
Workflow Management	1. Student ☐ Guide ☐ HOD 2. Dealing Assistant (A.P)
Remarks	-

Sub Module 17 : Student Branch Change

Input	Student has to fill out an online application form specifying his/her 1st Preference and 2nd Preference
Process	1. Formula- Criteria fixation provision should be available. 2. Criteria here means percentage of students who can come in and go out of the department based on class strength. 3. Courses fixed for calculating SGPA 4. SGPA of the candidates has to be calculated and should be arranged in descending order. 5. Based on SGPA and preference of the student the new branches should be alloted. 6. Email confirmation is to be sent to all the candidates who have been allocated a new branch. New roll No. 's has to be given to them.
Output	Reports such as: 1. List of students applied for branch change. 2. List of students who have been alloted new branch- Branch wise. 3. This has to be updated in the Computer Centre portal page with old roll number for generating new email, WiFi and LDAP accounts.
Interface	-
Workflow Management	-
Remarks	-

Sub Module 18 : Curriculum

Input	Student Roll No. and Name Curriculum approved by the Senate (uploaded by the Dept. and verified by Acad)
Process	1. There should be a provision in ERP, where departments can upload their curriculum approved by the Senate. 2. Academic office has to check

	3. ERP should allow students to register courses as per uploaded curriculum.
Output	1. List of students who had not registered courses as per curriculum. 2. List of discrepancies, between the courses registered by student and Dept. Curriculum- Student wise. 3. Semester wise check. 4. Complete courses registered by the student Vs Respective Curriculum applicable to the student.
Interface	Executive Assistant of the Dept. concerned/ Faculty advisor/Dept. HODs
Workflow Management	Dealing Assistant of the Dept. □ Faculty Advisor □ Dept. HODs □Academic Section
Remarks	-

Sub Module 19: Student Course Feedback

Input	Applicable to all Programs. After the end of each semester student has to mandatorily fill out an online form and submit it within stipulated time.
Process	Student from his/her ERP login have to give feedback for all the registered courses at a specified time, failing which the student will not be able to view the grades.
Output	Report on Feedback of Students- Faculty Wise and Semester wise.- to be viewed by DoFa office and Acad office
Interface	Dean of faculty office
Workflow Management	Student □ Academic section for viewing
Remarks	The courses registered as 'Audit' should not be given access to give course feedback

Sub Module 20: Student No dues

Input	Online form to be filled by the student. This is applicable to all the graduating students/ students who want to withdraw .
Process	Students need to fill out an online form and forward it to all departments simultaneously for approval/ rejecting with comments . Reminder to be sent to the section concerned if not cleared. Once he receives the clearance from all the departments, the request has to flow to get approval from DR(F&A), DR(A.P) and Registrar. Student when submites the original Student ID Card and soft copy of thesis (for M Tech and PhD students) in the ERP module. Once he gets approval from the Registrar. ERP should generate a No-dues certificate> Academic Section

Output	Report- List of students who have dues department wise List of students who do not have any dues.
Interface	Admin , Estate, Guest House, Library, Stores, ME Workshop, Computer Centre, Sports, Hostel, Mess, R& D, F&A etc. Academic - All sections
Workflow Management	1. Student ☐ All Depts & Admin heads ☐ Deputy Registrar (F&A) ☐ Dy. Registrar(A.P))☐ Registrar 2. Dealing Assistant(A.P)
Remarks	Reminder to be sent to all the students who have not submitted No-dues certificates in the Academic Section.

Sub Module 21: Student Convocation Registration

Input	Students need to fill out an online application form with necessary details.
Process	There should be a provision for the graduating students to register themselves so as to attend convocation. Students may choose any available options such as. 1. Collect degree certificate in presentia on the day of convocation 2. Collect degree certificate in absentia after the day of convocation 3. Request to send degree certificate by post.
Output	Reports: List of Students willing to attend convocation. List of student who will collect their degree certificate in absentia List of students who want a degree certificate to be posted to their address. The list of Convocation registered students should appear in the Computer Centre portal as Graduated List with grouping of Programs such as B.Tech, M.Tech etc.
Interface	With other sections to view
Workflow Management	Student ☐ Dealing Assistant(A.P) ☐ Section officer(A.P) ☐ Assistant Registrar(A.P)☐ Deputy Registrar(A.P)
Remarks	

Sub Module 22: Faculty request - Grades upload and Grade Change

Input	1. Grades course wise and student wise.(In Excel Sheet) 2. For grade change : Faculty has to fill out an online form Old Grade, New Grade and the reason why it has been done.
Process	There should be a provision where faculty can upload an excel file having grades of all the students registered for a course within the deadline.

	In case the course co-ordinator concerned has not submitted the grades within the deadline, He/She needs to get approval from Dean Academics. For grade change : Faculty need to fill out an online form in which the old grade and the new grade for a course has to be mentioned.The reason for grade change has to be mentioned. Then it will be forwarded to HoD, DR(A.P), Dean(A.P) for approval.
Output	1. Confirmation email to course coordinator concerned and Academic Section once the grades are submitted/uploaded. 2. List of courses for which the grades have been awarded. 3. List of Courses for which the grades have not been awarded.
Interface	Faculty Module- Course Instructor Faculty Advisor and HoD.
Workflow Management	Faculty Advisor> HOD> Students(only if the student has submitted the feedback for the course) For grade change - Course Instructor ☐ HoD ☐Deputy Registrar (A.P) ☐ Dean (A.P) Acad section to view all reports
Remarks	Various reports based on the inputs and outputs required Reminders for grade submission after course end date and exam

Sub Module 23: Faculty request- Doctoral Committee Constitution and DC Meetings Review

Input	Guide has to fill out an online form for DC constitution or DC meetings
Process	DC formation: Doctoral committee has to be constituted within a specific timeframe from the date of joining of research scholar. Guide has to select other faculty members (as per rules existing) to be a part of the Doctoral committee then he has to forward it to HOD for approval> Acad office> DR> Dean DC Meeting: At specific time intervals DC meetings should happen. The members should get alerts and facility to upload the recommendations of DC regularly 1. After specified duration a candidate has to appear before the DC committee for review of the Ph.D research progress at regular interval 2. If the review is found satisfactory/good/excellent the candidate is allowed to continue his/her research work. 3. If the review is found unsatisfactory the DC committee will recommend further proceedings.
Output	List of all such requests received. Various reports based on inputs received.Report: Student wise DC members list to be generated
Interface	Dept. Executive Assistant , Faculty and HOD
Workflow Management	1. Faculty ☐ Doctoral committee members ☐ HoD

	2. Dealing Assistant (A.P) ▢ Deputy Registrar (A.P) ▢ Dean (A.P)
Remarks	-

Sub Module 24: Comprehensive Exam

Input	Guide has to fill out an online form for Comprehensive Exam
Process	1. Within the specified time frame from the date of joining, students have to attend Comprehensive Exam (written/oral or both) 2. Date and details of exam to be captured 3. Guide will upload the evaluation grades/ marks/ pass fail status in a specified format. 4. The exam can be taken specified (as of now 2) times 5. Based on the result of comprehensive exam the next step will automatically be decided (proposal defense or exit option)
Output	List of all such requests received. Various reports based on inputs received
Interface	▢ Dept. Executive Assistant , Faculty and HOD Result will flow to Proposal defence module
Workflow Management	1. Guide/Faculty ▢ HoD 2. Dealing Assistant (A.P) ▢ Deputy Registrar (A.P) ▢ Dean (A.P)
Remarks	Various reports based on the inputs and outputs required

Sub Module 25: Exit option

Input	Student has to fill out an online form for quitting or exit option with MS degree
Process	Specified credits needed for exit with MS along with thesis submission
Output	List of all such requests received. Various reports based on inputs received
Interface	▢ Dept. Executive Assistant, Faculty and HOD Result will flow to Proposal defence module
Workflow Management	1. Guide/Faculty ▢ HoD 2. Dealing Assistant (A.P) ▢ Deputy Registrar (A.P) ▢ Dean (A.P)
Remarks	Various reports based on the inputs and outputs required

Sub Module 26: Faculty request - Evaluation of Proposal Defence

Input	Guide has to fill out an online form.
Process	1. Within the specifiedWithin specified time frame from the date of joining, students have to give a proposal defence. Doctoral committee will evaluate his proposal defense.

	2. If the proposal defense is found satisfactory/good/excellent the candidate is allowed to take up his/her research work.
	3. If the proposal defense is found unsatisfactory the DC committee will recommend further proceedings.
	4. Report to be generated
Output	List of all such requests received. Various reports based on inputs received
Interface	☐ Dept. Executive Assistant, Faculty and HOD
Workflow Management	1. Guide/Faculty ☐ Doctoral committee members ☐ HoD
	2. Dealing Assistant (A.P) ☐ Deputy Registrar (A.P) ☐ Dean (A.P)
Remarks	Various reports based on the inputs and outputs required

Sub Module 27 : Faculty Request- JRF to SRF Conversion

Input	Student has to fill online form
Process	1. Once the candidate has completed specified years then the guide will request for upgradation of the research scholar from JRF to SRF.
	2. After filling the online form student has to forward the request to Guide and then committee members,i.e HOD and external member for approval.
	3. Once approved it will be forward to DR(A.P), Dean(A.P).
Output	List of all such requests received. Various reports based on inputs received
Interface	Dept. Executive Assistant, Faculty and HOD
Workflow Management	1. Guide/ Faculty ☐ ☐ HoD ☐
	2. Dealing Assistant (A.P) ☐ Deputy Registrar (A.P) ☐ Dean (A.P)
Remarks	-

Sub Module 28: Faculty request- Conduct of Open colloquium and OC report

Input	Scholar has to fill online form and then Guide will upload necessary documents
Process	1. The guide in consultation with Department HoD should fix the date of Open Colloquium (within specific time)
	2. Guide has to upload certain specified documents (a copy of the draft synopsis, details of Journal/Conference publications,option form and final thesis.
	3. Declaration of similarity index by Scholar, Guide DC members and HoD to be done online and channel to be followed .
	4. Entry of list of examiners etc.
	5. Dean will select examiners from list provided
	6. After OC conduct - Based on the presentation made by research scholar on the day of open colloquium, the

	guide and DC committee members will recommend further course of action. 7. OC Report to be approved online by all DC members and other other administrative channels
Output	1. List of all such requests received. 2. Various reports based on inputs received
Interface	DC members, Dept. Executive Assistant, Guide/ Faculty and HOD
Workflow Management	1. Guide/Faculty ☐ Doctoral committee members ☐ HoD ☐ 2. Dealing Assistant (A.P)> SO> ☐ Deputy Registrar (A.P) ☐ Dean (A.P)
Remarks	

Sub Module 29: Faculty request- Conduct of Viva

Input	Final thesis to be uploaded, date of exam and time entry to be made by Guide Report of final Viva
Process	After the date of Viva viva report to be uploaded/ generated Honorarium amount to be decided based on mode of exam Facility to upload examiner bank details
Output	1. List of all such requests received. 3. Various reports based on inputs received 4. Reminders to be sent to all stakeholders before conduct of Viva 5. Viva Report/recommendations to be approved online by all members and other other administrative channels except external examiner, the report of external examiner has to be uploaded. 6. The recommendation made be external examiner which has been incorporated in the thesis has to be certified online by Guide and DC members 7. Viva completion certificate / Final provisional and original degree to be generated
Interface	Based on No dues, Final provisional and original degree Certificates to be generated DC members, Dept. Executive Assistant, Guide/ Faculty and HOD Accounts section to pay honorarium
Workflow Management	1. Guide/Faculty ☐ Doctoral committee members ☐ HoD ☐ 2. Dealing Assistant (A.P) ☐ Deputy Registrar (A.P) ☐ Dean (A.P)
Remarks	

Sub Module 30: Faculty request- Summer Term and Winter Term

Input	Faculty has to fill the online form
Process	Faculty has to request if he intends to offer a course during winter term or summer term.

Output	List of all such requests received. Various reports based on inputs received
Interface	Faculty, HOD ,
Workflow Management	1. Course Instructor ⬜ HOD ⬜ 2. Dealing Assistant ⬜ Assistant Registrar (A.P) ⬜ Deputy Registrar (A.P) ⬜ Dean (A.P)
Remarks	Various reports based on the inputs and outputs required

Sub Module 31 : Academic Work Distribution

Input	Student roll no. Key words like- Grade Card, Bonafide, Scholarship Delegation of duties
Process	Students while putting up any request, fill a form, based on the roll no. and key words in the form filled by the student, the request should be directed to the concerned dealing assistant If task/ role is not defined then request to be directed to DR, Acad and then forwarded to the dealing assistant concerned
Output	List of duties assigned to all dealing assistants.
Interface	Student request module.
Workflow Management	1. Request to directly Dealing assistant concerned 2. DR / Assistant Registrar (A.P) ⬜ Dealing Assistant
Remarks	Various reports based on the inputs and outputs required

Sub Module 32 : Academic Work Monitoring

Input	Academic calendar integration Key words: Student batch: eg. BTech 2017,2018, 2019 and 2020 Scholarship , Fellowship, NAD ID,Course Registration
Process	
Output	Real time work status 1. Task completed 2. Task ongoing 3. Tasks which are yet to be completed.
Interface	nil
Workflow Management	Dealing Assistant ⬜ Section Officer ⬜ Assistant Registrar ⬜ Deputy Registrar ⬜ Dean
Remarks	-

Sub Module 33 : Academic Certificate and Grade Cards Status

Input	Timely updation of data in ERP
Process	Dealing assistant(A.P) has to update the status of certificates issued to the student, the certificates which are printed , certificates which are yet to be printed.
Output	Reports batch wise and semester wise 1. Certificates issued 2. Certificates pending 3. Id Card Issued status 4. Various bonafide certificates issued status.
Interface	-

Workflow Management	Dealing Assistants(A.P)☐Assistant Registrar ☐ Deputy Registrar ☐ Dean
Remarks	Various reports based on the inputs and outputs required

Sub Module 34 : Academic Inward/Outward/Dispatch

Input	Request received from Student/Staff/Faculty/Parents
Process	A unique no. has to be generated by system for all the requests which are received/made by academic Section.
Output	Daily reports of requests 1. Inward 2. Outward 3. Dispatch
Interface	All Modules available.
Workflow Management	Other Sections> Academic Section. Academic Section> Other Sections
Remarks	Various reports based on the inputs and outputs required

Sub Module 35 : Academic File Tracking

Input	Digital File Tracking Number.
Process	Each Student file has to be given a unique file number. File tracking number should be displayed
Output	Student Dept/ Batch /Roll Number wise Tracking System for all the files in Academic Section
Interface	-
Workflow Management	-
Remarks	Various reports based on the inputs and outputs required

Sub Module 36 : Academic Alumni

Input	1. Request for Duplicate Transcripts 2. Request to Post Certificates (Payment Gateway ?) 3. Educational verification request
Process	After Students make a request dealing assistant concerned will do the needful.
Output	Email confirmation to the student.
Interface	-
Workflow Management	-
Remarks	Various reports based on the inputs and outputs required

Sub Module 37 : Time Table creation and Management

Input	Department Time table coordinator, Course Coordinator/Instructor, Segment, Slot, Pre-Requisite, Course

	Eligibility, Elective Type, Registration Type, Variable dates and class rooms with capacity.
Process	• Common Courses has to be finalized • Based on common courses department wise time table to be finalized.
Output	Department wise, Program wise and Year wise time tables
Interface	Course Registration and Management
Workflow Management	Common Course Time table coordinator has to communicate with all departmental time table coordinators to fix the common course slots and department wise time table.
Remarks	-

Sub Module 38 : Academic Classroom reservation

Input	1. Department time table. 2. Faculty requirement of Classroom.
Process	1. Semester wise Time table deployment facility should be available in ERP. 2. Academic Staff and Individual faculty should have permission to reserve/cancel a classroom as and when required.
Output	1. As per Timetable (Semester Wise) 2. As and when required (Day wise)
Interface	Faculty Module
Workflow Management	Faculty/ Department Time Table committee member> HOD>Dealing Assistant(A.P)> Acad section
Remarks	1. Various reports based on the inputs and outputs required

Sub Module 39 : Meeting rooms reservation

Input	Availability of meeting rooms/ conference halls, schedule of meetings, integration with calendar
Process	Admin Staff should have permission to reserve/cancel a meeting room/ classroom as and when required.
Output	As and when required (Day wise), reminders to guests/ invitees
Interface	
Workflow Management	
Remarks	Various reports based on the inputs and outputs required

Sub Module 40 : Student Exchange Program

Input	IITH Students, Foreign students, names of universities, duration, program, financial assistance covered, courses taken up etc.
Process	Database and specific certificates (grades/ transcripts) issued Grade mapping with foreign universities
Output	Various reports
Interface	IAR office

Workflow Management	Dealing Assistant □ Section Officer □ Assistant Registrar □ Deputy Registrar □ Dean
Remarks	

Sub Module 41 : Senate, AAC, SUGC and SPGC Proceedings

Input	List of Members of Senate, AAC, SUGC and SPGC List of Members of various standing committees of Senate, AAC, SUGC and SPGC
Process	Fixing dates of Senate, AAC, SUGC and SPGC meetings Fixing dates of various sub-committee meetings periodically as per statutory/internal requirements Agenda to be uploaded - in login of members should be visible Minutes of meetings to be uploaded - in login of members should be visible Issue office orders based on decisions taken by senate, AAC, SUGC, SPGC and its committees Archive all records relating to senate, AAC, SUGC and SPGC and committee meetings
Output	Dates of Senate, AAC, SUGC, SPGC and Sub-Committee meetings held during an academic year Database of agenda, minutes and office orders
Interface	Student Information Management sub-module Course Management sub-module Faculty members, DUGC and DPGC members
Workflow Management	Dealing Assistant □ Section Officer □ Assistant Registrar □ Deputy Registrar □ Dean
Remarks	

Modules under Dean Students (Core module)

MODULE : HOSTEL MANAGEMENT (Other module)

Sub-Module 1: Reports and metadata management

Function 1: Room management

1. Add/delete/edit and group rooms
2. Add/delete/edit/search hostels
3. Add/delete/edit PODs
4. Block rooms for Official Purpose
5. Alerts for Rooms under Repair

Function 2: Metadata Management

1. Add metadata about type of complaint and concerned person/department with contact details, alert time, alert type
2 . Hostel Rules and regulations
3. Warden and staff details
Interface: Hostel Office, DR Hostel, Warden,HCU Chair

Function 3: Reports

List of registered students filtered by combination of year (all); Program (Batch, program, department) (all) ; Physical disability(all), Gender , Block wise, POD Wise,Room wise, Blood group

1. List of vacant rooms filtered by combinations of hostel, group etc
2. Allocation list filtered allocation date/month/year in a hostel (or in all hostels)
3. Hostel history of a student like the rooms he occupied in various periods
4. Past student details

Sub Module 2 : Student Hostel Registration

Input	1. Student details : Name, DOB, Gender, Photo, Roll No,Blood Group, Address(Phone,complete details) ,Nationality, qualification, Program, Date of arrival , Physical disability,Past medical history (if any), Payments made by student should be available
	2. Family details : Father/Guardian ; Address ; Occupation; Local Guardian details with address and phone number
	3. Signed copy of parent declaration

Process	Upon admission to the Institute, Academic section approves hostel admission
	1. The data to be filled by student/Acad section
	2. Agree to terms and conditions of the hostel (i.e., hostel rules) by the student and upload signed copy of parent declaration
	3. Payment of Hostel and Mess fee and approval from Accounts
	4. Approval from Hostel Office
Output	1. List of registered students filtered by combination of year (all); Program (Batch, program, department) (all) ; Physical disability(all), Gender , Block wise, POD Wise,Room wise, Blood group ,Roll no
	2. Past student details to be made available
	3. Room allotment confirmation by Hostel Office
Interface	1) Hostel Office ; 2) Accounts 3) Acad office 4) Student 5) DR Hostels 6)HCU Chair
Workflow Management	Acad -- Student -- Accounts -- Hostel Office
Remarks	1. Various reports based on the inputs and outputs required

Sub-Module 3: Hostel admission.

Function 1: Room allocation and occupation

Input	Students who are not allotted rooms, Vacant rooms and/temporarily free rooms, rooms under repair , Details of international rooms.Medical emergency, Hospital Admission details , Insurance covered, Expenses incurred
Process	1.Selection of students who are not allotted rooms filtered by various combinations of gender, Physical disability, year, program, Nationality etc, and vacant rooms filtered by hostels, "groups", temporarily free or not, etc by the hostel office, and then do a random assignment.
	2.Provision for Manual Allocation
	3.Swap students for room change (Wardens approval)

Output	Random Assignment and generate the output.
Interface	hostel office, wardens,DR hostels, student, HCU Chair
Workflow Management	After the allocation by the system, the Hostel office confirms, students get a message in email, students complete the occupation report containing a list of items in the room like cot, study table etc, and then the hostel office confirms.
Remarks	Various reports based on the inputs and outputs required

Function 2: Permanent Move out

Input	Students who are allotted rooms, allotted rooms
Process	1.Students apply for moveout (permanent) 2.Fill vacation form online 3.The hostel office provides no-due certificate 4.DR and warden approves., Details of recovery for damage
Output	Mark the rooms free and generate output.
Interface	hostel office, wardens, DR hostels, student, HCU Chair
Workflow Management	Student -- hostel office -- DR Hostel -- warden
Remarks	Various reports based on the inputs and outputs required

Function 3: Deallocation (short term vacation)

Input	Students who are allotted rooms
Process	1.Students apply for deallocation 2.The hostel office approves
Output	Mark the rooms temporarily free and generate the output.
Interface	hostel office, wardens, DR hostels, student, HCU Chair
Workflow Management	Student -- hostel office -- DR Hostel
Remarks	Various reports based on the inputs and outputs required

Function 4: Reallocation

Input	Students who are deallocated rooms, vacant rooms
Process	1.Students apply for reallocation 2.The hostel office runs an allocation algorithm. We need two choices for algorithms. One is random allocation and the other is to reallocate the previously occupied room as much as possible.
Output	Mark the rooms occupied, students allocated and generate the output.
Interface	hostel office, wardens, DR hostels, student, HCU Chair
Workflow Management	Student -- hostel office -- DR Hostel

Sub-Module 3: Room Booking.

Input	Student / Visitor/ Guest Name ; Gender ; Phone number, Address, Duration of stay, reason for visit(Type of program/workshop/conference), University details, Emergency contact details, Payment information and confirmation with SBI collect reference number.list of Past occupants of room, Temporary room allocation
Process	1.Staff/ Student/ Faculty apply for room booking , 2.Hostel office allots rooms based on payment made, availability and approval from Warden .
Output	List of booked rooms, duration, purpose of visit , Payment received, Past History (2 years) of occupants, Bulk accommodation
Interface	Hostel Office, DR Hostel, Warden, Student ,HCU Chair
Workflow Management	Student/Department/Faculty -- Hostel office-- Warden approval--Payment confirmation--Hostel office--Student/Department/Faculty
Remarks	Various reports based on the inputs and outputs required

Sub-Module 4: Maintenance/Complaints

Input	Room No, Block Name, Type of complaint (Civil/Electrical), Date of complaint
Process	1)Student raises complaint 2) Hostel office confirms 3) Complaint forwarded to concerned dept 4) Once resolved, update to hostel office and Student 5) frequency of complai
Output	(Pending) List of Complaints and Type of complaints filtered by combination of room, Block details,date ; Type of complaints , Resolved complaints,frequency of same complaint received
Interface	Student, Hosteloffice, DR Hostel, Warden, concerned departments (from meta data), HCU Chair
Workflow Management	Student/Hostel-- Hostels--Concerned section (CMD/Stores) -- Hostel/Student
Remarks	Various reports based on the inputs and outputs required

Sub-Module 5: Hostel Staff details

Input	1)Staff name, Designation, Employee No.,DOB, address, phone number, Blood group, date of joining institute, NOK Details, Emergency contact ,date of leaving institute/retirement date, Warden details. 2) Date of Leave, duration of leave, type of leave 3) Any other requests/remarks 4)Daily attendance
Process	1)Staff attendance entered daily (In and Out time) 2) Staff apply for leave, DR Hostels and HCU approve
Output	List of hostel staff , Old staff details, Leave record, Balance of leave, attendance details including past details filtered by combination of staff no, month,year etc
Interface	Hostel Staff, DR Hostels, HCU chair
Workflow Management	Hostel Staff--DR Hostels--HCU
Remarks	Various reports based on the inputs and outputs required

Sub-Module 6: Hostel Imprest

Input	Date; Type of expenditure ; Amount spent, Amount allotted,Advances and Purchases made by Hostel Office
Process	1.Accounts allots Hostel Imprest to HCU Chairman 2.The hostel office spends on contingency related issues, 3.Submits bills to accounts on completion of alloted amount 4.Accounts verifies,settles and reallots Imprest balance
Output	Chronological order of expenditure made filtered by combinations types, dates, etc, Balance of imprest amount available.
Interface	Hostel Office, HCU Chair, DR Hostels, Accounts
Workflow Management	Accounts--HCU Chair--Hostel Office/DR Hostels--Accounts
Remarks	Various reports based on the inputs and outputs required

Sub-Module 7: POD Coordinator Bills

Input	Date, Student name, Roll no., Room no.,Block name, Floor, POD No.,Program (Course , year,dept),Amount spent with bill
Process	1.Accounts allots imprest amount to POD Coordinators (initially) 2.POD Coord spend and submit bills to hostel office 3.Hostel office verifies and submits consolidated list to accounts 4.Accounts verify, settle amount and reallot imprest amount to student POD Coord
Output	(List of) POD Coordinators and the information about the amount spent filtered by combination of date wise,Month wise, block wise, floor wise, program wise
Interface	Hostel office, Accounts, DR Hostels, HCU Chairman
Workflow Management	Accounts--POD Coord--Hostel Office/DR Hostels--Accounts
Remarks	Various reports based on the inputs and outputs required

Sub-Module 7: Hostel office Inventory

Input	Date of receipt, Type of inventory, (Cupboard/Cot/Table/Chair/water cooler/Mattress, pillow Bed Sheets,housekeeping consumables etc), Location of inventory, date of purchase, Cost, warranty(if any)
Process	Hostel office receives inventory/stock from stores and admin Allots inventory to different hostels When damaged/unrepairable, the same is sent as scrap Request for new stock, Generate unique identifier
Output	List of all hostel inventory filtered by combination of type of inventory (also include them in the meta data and various reports about it), date of purchase,Location, scrap, Bar code generation and Scrape Management , Depreciation details.
Interface	Hostel office, DR Hostel, Stores, Admin, HCU
Workflow Management	Stores/Admin--Hostel office
Remarks	Various reports based on the inputs and outputs requiredHostel office should have ,Details of Tenders related to students and Hostels

Sub-Module 8: Housekeeping staff and Manpower details [If the data is with admin please give access to it, otherwise we need the following]

Input	1)Contract Employee name, Designation, Type of contract(Housekeeping/Manpower), Date of joining , Location employed (should also be there in the meta data and we should be able to add/delete/edit), Remarks, Age, Blood group, NOK /Emergency contact details 2)Daily Attendance, Leave details

Process	1.Every year a contract is made with the list of contract employees
	2. Attendance is monitored, consolidated list of attendance is sent to accounts/admin
	3.Payment made to contractor and they make the payment to their employees
Output	List of all employees based on Type of contract, location, name etc, Attendance report(day and month wise)
Interface	Hostel office, Accounts/admin, DR Hostels, HCU chairman
Workflow Management	Daily attendance of contract employees-- supervisor-- hostel office-- Accounts/admin
Remarks	Various reports based on the inputs and outputs required

Sub-Module 9: Disciplinary issues

Input	Date ,Student details (Roll no, Room Number , Block details etc)Type of offence, Penalty Imposed, Details of payment
Process	Students violate Rules & Regulations, Council of Wardens report the matter to DAC and Impose Penalty.
	Hostel Office will seize the ID Card
	DAC will take separate action
	Student pays the penalty amount to Institute account
	Hostel Office follows up on the payment and re-issues the Seized ID card
Output	List of all students filtered by combination of Date, Program, Room, Month wise etc
Interface	Hostel office, DR Hostel, Warden, HCU, Accounts
Workflow Management	Hostel Office- Student--Account--Hostel Office

Module: Mess management (Other module)

Sub module: Mess Registration

Input	
Process	Every month, students will select the dining hall they want to go to during the next month. In each dining hall, QR codes on students' mobile phones application or dining hall website, or the barcode on their student ID will be scanned to verify that they had opted for this dining hall. The QR code should be encrypted and dynamic. One QR code should not work twice. Full functionality should be available on the dining hall website as well as on a mobile app. The app should work on Androids and iphones. All the users (admin, caterers, and students) should be able to use the complete functionality seemlessly from within and outside the institute network.
Output	

Interface	Three types of users should be created 1. One Administrator 2. Up to 10 caterers 3. Up to 20,000 students
	
	1. Administrator:
	    a. Should be able to see the current registration for each mess, no. of people who have scanned their QR code or student ID in each mess for each meal.
	    b. Should be able to change the allocated mess for any student
	    c. Add a student's name to the database and paid users list.
	    d. Should be able to set the limit for max registrations for a mess and trigger the registrations for the next month without disturbing the functioning of the current month.
	    e.
	    e. Generate reports every month on registration, complaints, caterers performance, maintenance.
	
	2. Student:

	a. When the registration for the next month is switched on by the admin, students will be asked by the admin to register for the next month.
	b. If the student's name is on the "paid list", he/she should be able to opt for one of the dining halls.
	c. Once a student selects a dining hall, he should see the QR code for the current meal
	d. Should be able to avail the mess food by showing the QR code upon logging into the app or the dining hall website or the barcode on his student ID.
	
	3. Caterer:
	    a. Should only see the scanning window.
	    b. Should be able to scan the QR code on students' phones using a webcam and the barcode on the student ID using a barcode scanner.
	    c. The caterer's system should send a query to the server to verify whether this student is assigned to this mess for the current month and a green light should pop on the screen.
	4.

Workflow Management	Starting at the beginning of a semester, the list (a google sheet) of paid users should be populated from the account section's database that stores the list of students who have paid the mess fee for the semester. The google sheet should be updated automatically once everyday. Dining admin should be able to add students to this list manually. Students should be able to sign into the dining hall website and the mobile app using the institute (google) login id and password. Upon signing in, if the student's roll number is not found in the paid users' list, a message should be displayed asking him/her to contact the hostel office. Before the starting of each month, the admin should set the value of the maximum number of students that are allowed to register to one mess and trigger the registration for the next month. After the registration is triggered, when a student logs in to the dining app or the dining website, the system should check (real-time) if the student's credentials exist in the paid users list. If yes, he/she will be asked to select one of the dining halls for the next month. Students should also be able to see the total number of students who have already registered for each dining hall. The option to select the dining hall should remain available until he/she selects the dining hall (even after the next month starts). The student should be able to ignore it and go on generating the QR code for the current meal. Once the maximum number of students registered to a dining hall is reached, students should not be able

	to register for that dining hall. Once the student opts for a dining hall, the option becomes unavailable and only a button to generate the QR code for the current meal is shown. The registration for the next month should not disturb the functioning of the current month. Once a student requests the QR code, the server should send the encrypted QR code. The QR code should be unique for each student and each meal. When the student scans this QR code or his/her student ID at the dining hall counter, the server should check whether this student belongs to this dining hall for this month. If it does, it should pop a green light on the screen of the caterer's system along with the name and roll number of the student. Otherwise, it should display the relevant error message. One student should not be able to successfully scan the QR code/barcode twice for the same meal.
Remarks	

Sub module: Online Purchase of Extras Items etc.

Input	
Process	The dining hall admin will maintain a google sheet of extras (having details of item name, quantity, and price). The caterer will have the option to select some of those items for the upcoming 10 meals (through the app as well as the website). Once the caterer makes it available, students will have the option to buy those items in advance through the app and the website. UPI/BHIM based payment options should be available. On a successful payment, aunique, encrypted, single-use, QR code corresponding to this purchase should be produced in the student's web portal/app. Students should be allowed to select and buy the items only from the dining hall they are subscribed to for the respective meal. There will be a cutoff period after which the purchase is not allowed. The student should show this QR code and the caterer should scan this code during the respective meal to allow the student to collect the purchased item.
Output	
Interface	
Workflow Management	
Remarks	

Module name: Sports Module (Other module)

Input	For use by community

	1. Issue of sports material: equipment's name, requesting person's name, roll no./staff ID. Duration and period requested for.
	2. Request for booking into swimming slots: slot time
	
	Current availability of courts or swimming slots must be visible.
	--- 	
	For internal accounting
	  3. Attendance registers for ground attenders
	  4. Attendance register for students registered in NSO, by each sport
	  5. Recording inventory for each sports facility, including purchase dates

Process	Request for #1 or #2 reviewed and approved or declined. Others are for internal accounting only
Output	For #1 or#2 Intimation email sent to requesting person with comments.
Interface	1. Registers for project staff, ground men, NSO. 2. Attendance registers 3. Inventory of sports material 4. Issuance of sports materials to students (and staff and faculty). 5. Possible booking of courts for block use (for example some inter-departmental or office activity).
Workflow Management	Online payments ☐ Collecting hard copies of registration forms, payment receipts ☐ Issuing swimming passes.
Remarks	1. We may have registrations for other sports facilities in the future. 2. All purchases of sports material and sports kits through stores and purchasing department by tendering.

Module Name: Management of Student Activities

sub module:

a. Formation of Club

Input:	- Name of the club - Coordinators Details (Name, roll no, Phone number, roll in the club) - Team Members Details (Name, roll no, Phone Number, roll in the club) - Date of formation of club - Tenure - Type of club (cultural, SciTech, Sports, Any other under Gymkhana)
Work Flow:	- Club coordinator/SciTech Secretary/Cult Secretary - President - Faculty Advisor - Dean of Student Affairs - Director

sub module:

b. Deactivation of Club

Input:	- Deactivation with Reason - Approval for Deactivation - Clearance of Financial settlements - Handover of Infrastructures/Equipment's - Submission of Data (write up, photos,) to concern authorities - Type of club (cultural, SciTech, Sports, Any other under Gymkhana)
Work Flow:	- Club coordinator/SciTech Secretary/Cult Secretary - President - Faculty Advisor - Dean of Student Affairs - Director

sub module:

c.   Finance

Sub sub module:

1.   Annual Budget

Input:	■ **Consolidate & annual budget** ■ **Tentative breakup/budget heads**
Work Flow:	○ **Club Secretary** ○ **Faculty Advisor** ○ **Dean of Student Affairs** ○ **Director**

Sub sub module:

2.   Common Advance form

Input:	■ **Name** ○ **Purpose** ○ **Amount-Breakup** ○ **Date** ○ **Club Name** ○ **Type of Expense: Equipments & consumables, Travel, Event**
Work Flow:	i. **Club coordinator/ SciTech Secretary/ Cult Secretary** ii. **Faculty Advisor (history of previous financial transactions)** iii. **Dean of student affairs (history of previous financial transactions)**

Sub sub module:

3. Common Settlement form

      i. Equipment Purchase

Input:	· **Inventory form has to be filled by purchaser** § **Name of Purchaser** § **Items – Breakup** § **Amount** · **Submission to concerned staff**
Work Flow:	· **Faculty advisor approval** · **Dean Students Approval** · **Submission to Stores & Purchase Section**

      ii. Finance settlement for Travel

Inputs:	i. **Student uploads – travel plan, travel reports, bills.**
Work Flow:	· **submit bill to the concern office** · **staff checks & approval for further action**

Sub sub module:

4. Event Settlement

Inputs:	i. **Close with approval of Faculty Advisor with maximum time limit of 01 month** ii. **Periodic reminders for settlements after 1 week of raising of advance to Student, concerned staff**

Sub module:

d.   Events Approvals

Input:	**1. Event Request**
	
	     i. **Name of student**
	     ii. **Name of the club**
	     iii. **Roll of the student in the club**
	     iv. **Tentative budget**
	     v. **Date of event**
	     vi. **No., of expected participants**
	     vii. **Description of event**
	     viii. **Approval from faculty advisor**
	     ix. **Forwarding to Dean Students**

Work Flow:	**2. After Approval of event**
	
	     i. **Booking of Venue**
	     ii. **Information to concerned Authorities**
	     ▪ **CMD**
	     ▪ **Hostels (Housekeeping, etc.,)**
	     ▪ **CSO**
	     ▪ **Academic (for mic settings, room booking,)**
	     ▪ **Transportation**
	     ▪ **Admin (for arranging refreshments, Lamp, chairs)**
	     ▪ **Photography club**
	     ▪ **PRO for Media coverage if any**
	     ▪ **Any other concern authorities**

Sub module

e.   Events Cancellation

Input:	1. **Reason for cancellation**
	        i. **Acceptance of faculty advisor**
	      ii. **Acceptance of Dean students**
	
	2. **Appropriate information**

Sub module:

f.   Event Closure

Input:	1. **Report submission**
	      i. **No of students participated**
	     ii. **Awards/Prizes/position in competition**
	    iii. **Photos/Videos of the events**
	    iv. **Write up**
	     v. **Update to social media & webpage**
	    vi. **Start & End time, Date**
	
	2. **Financial Settlements**
	      i. **Submission of proper bills**
	     · **Verification by concerned staff**
	     · **Acceptance by faculty coordinator**

Sub module: GUI Retrieval of Information

v Retrieval of Information by Staff/Faculty Advisor/ Dean Student

	Format:					
Input						
		Year	**Event Name**			
Output						
	Name of Event	**Date of the event**	**Budget**	**No of Participants**	**Write up**	**Venue**

Sub module: Inventory Management

Inputs:	i. Student inputs purchase details from c.4(i) ii. Student inputs on status of equipment periodically cat least once a semester iii. location of equipment, current status
Interface:	i. Club coordinators, Faculty advisor, Dean of Student affairs, student can view ii. Sort & Search database based on data, type of equipment, status, etc.

Sub module: Venue & Infrastructure Approval

Input:	**Club coordinators, SciTech & cultural secretary request usage of classrooms, common areas, infrastructure (cameras, white boards,)** i. **Name of event** ii. **Club name** iii. **Student name** iv. **Event date, time** v. **Purposed venue** vi. **Has this event been already approved**
Work Flow:	i. **Club coordinators** ii. **Faculty advisor (information from event approval)** iii. **Required permission from** · **Dean of student affairs** · **DR Acad/Dean Academics** · **Room booking** · **AR Hostels/DR Students/Wardens** · **DR Admin/Dean Admin** **Remarks: periodic reminders to return borrowed items/infra**

Sub module: Club & Calendar Information

Input:	● **President/SciTech secretary/ Cult Secretary enters details of all coordinators & core members of all clubs.** ● **Ability add/remove after approval from Faculty Advisor & Dean Student Affairs** ● **President/SciTech Secretary/Cult Secretary enters details of all planned events in the entire academic year with dates. (this will become the default list of events).**

Interface:	● **Sorting & searching based on: roll number, name, club name, designation etc.** ● **Sorting & searching based on: date, event name.**

Modules under Dean of Faculty affairs (Core module)

Module: Faculty Management (Core module)

Input	Faculty Information with below fields and more 1. Faculty Name (Add/Delete) 2. Faculty Emp. ID 3. Date of Joining 4. Date of Birth 5. Category 6. Qualifications (Ph.D./Masters/Bachelors) with University/Institute 7. Ph.D. Specialization (Mandatory for NIRF Data) 8. PDF (Abroad/India) 9. Faculty Room Number and Block 10. Faculty Ph. No (Landline/Mobile) 11. PAN Details (Mandatory for NIRF Data)
Process	
Output	Dashboard with Faculty information management to update/modify/delete After updating a new Faculty information, it has to be updated in the Computer Centre portal for IT service provision.
Interface	Access to DOFA and approved authority
Workflow Management	
Remarks	

Module: Faculty Leave Management (Core module)

Input	Faculty requests for leave with needed Information
Process	1. Faculty requests for leave with needed Information: For CL/RH, the HoD is the sanctioning authority, and the department (or EA) maintains the record. For all other leaves: HoD approves, and then Dean Faculty approves. If there are any special cases (e.g., EOL or Child Care Leave etc), then it will be sent to the Director. 2. For CL/RH and other types of leaves of HoDs and Deans: Dean Faculty is the sanctioning authority, and for Dean Faculty: HoD is the sanctioning authority (for

	CL/RH), and for other types of leaves (EL,VL etc), the Director is, via HoD.
Output	
Interface	Access to DOFA and approved authority
Workflow Management	All Deans/Hod's/Faculty ☐ Dean Faculty
Remarks	

Module: Faculty Conferences/Block-Grant approvals module (Core module)

Input	Intender Faculty requests
Process	1. Intender Faculty requests for approval 2. It will be transferred Head of the Department 3. It will be transferred to Dean Faculty for approval 4.
Output	
Interface	Access to DOFA and approved authority
Workflow Management	Intender Faculty ☐ HoD ☐ Dean Faculty
Remarks	

Modules under Dean IAR (Other module)

Module name: IAR Office module (Other module)

Input	1. Foreign visitors Record (Foreign Faculty/ student):
	    a. Intimation to hostel office(students)/ Guest House(Faculty) for accommodation.
	    b. Academics for registration(students) only these Details:
	        i. Name
	        ii. Faculty advisor/ Faculty Invitee name
	        iii. course details
	        iv. period of stay (Period of arrival and going)
	        v. International Students Registration for Hostels , ID card , Course registration etc.
	2. Foreigners Database (Students):
	    a. Database of number of Foreign Students (incoming) & at IITH
	    b. Course wise: UG, PG, Ph.D. Intern:
	        i. Department
	        ii. Program wise (Complete Student Data in these courses)
	        iii. Accommodation Details
	3. Course Registration Details:
	    a. Inbound Students
	    b. Out Bound Students
	    c. Program wise
	
	4. IITH faculty visiting foreign country(Research / Academic Related).
	    a. Name
	    b. Faculty advisor/ Faculty Invitee name
	    c. course details
	    d. period of stay (Period of arrival and going)

Process	Process for foreign student arriving on Campus
	aForeign Student Reporting at
	    a. Reporting at hostel office for accommodation
	    b. Reporting to concerned IITH Faculty supervisor
	    c. Reporting to IAR Office
	        i. Registration: FRRO / Form S Submission of Passport, Visa, Invitation Letter, etc.
	    d. Reporting to Academic Office
	        i. Course Registration, Issue of ID Card, Bona fied, etc.
	
	Process for foreign student after Course completion and departure
	    1. Foreign student concerned IITH Faculty Supervisor Course Completion Details

	2. Course completion Details (by Faculty), Course Period (start & end Dates), Grades, Mark sheet etc.
	3. Reporting at
	    a. Academic Office
	        i. course certificates
	    b. IAR Office
	        i. Departure Details
	    c. Reporting at hostel office for vacations and departure
	
	Process for foreign Faculty arriving on Campus
	Foreign Faculty Reporting at
	    a. Reporting at Guest house for accommodation
	    b. Reporting to IAR Office
	       Registration: FRRO / Form S Submission of Passport, Visa, Invitation Letter, etc.

Output	Student Registration details program wise, inbound and out bound FRRO / Form c/ Form S Registration Details date wise , name wise Foreign Faculty visit details department/date/program/etc. wise
Interface	Viewing Access to AIMS for grades on international students
Workflow Management	
Remarks	Forms: **Form for foreign Faculty & student arriving on Campus:** IITH Faculty Details Name Designation Department **Foreign Delegate or Student Details:** Foreign faculty or Student Name Country of origin Institution/University Name Department Contact Details of faculty/Student Email Propose Date of Visit Propose Date of Departure from IITH Project/Course Details if any Accommodation Details Additional Information if any **Form for foreign Faculty & student for FRRO registration:** Surname * Given Name *

	Sex Date of Birth * Age Height (in cm) Place of Birth* Father's Name Mother's Name Spouse's Name Religion Any identification mark(s) preferably visible Present Nationality Previous Nationality Manner of acquiring present nationality Whether holding dual nationality? If yes, provide the following: - Name of the country of second nationality Passport No. of second country Date of Issue Date of Expiry Whether travelled on this passport earlier to India Whether person of Indian Origin Address of last residence (Outside of India) * Address City Country Address intended for longer stay in India (Registration) Address City State Pin Code Phone Number Mobile Number Any Other Address in India Address City State Pin Code Phone Number Mobile Number Email Occupation/Professional details Passport Details: - Passport No * Place of issue * Date of issue * Expire Date * VISA Details: - Visa No * Place of issue * Date of issue* Country Date of issue* Expire Date * Valid For

	Type of visa * Arrived from Country * Arrived from City * Arrived from Place * Date of Arrival in India * Date of Arrival in Institute * Time of Arrival in Institute * Intended duration of stay in Institute * Whether employed in India * Purpose of Visit * Next Destination * Contact Phone No (In India) Mobile No (In India) Contact Phone No (Permanently residing Country) Mobile No (Permanently residing Country) Remarks (like course details/sponsors/program/purpose etc., if any) * marks are mandatory fields **IAR Office student NOC form** Name of Student Branch Graduating Year and Program Roll No. Permanent Address Contact No. In India Personal email address Going for Higher Studies Name of the University Year & Month of Admission Department Program Enrolled (Put Tick mark) Other Exams appeared/planning to appear State PSC UPSC CAT Score GMAT Score GATE Score Others Job/Employment 1. I agree/disagree to share the personal details with Indian Institute of Technology Hyderabad Alumni Association (IITHAA)

Module: Alumni Sign Up module (This will be integrated with IAR web page) (Other module)

Input	Login / Sign up: Data filling with following fields: 1. Picture 2. Name roll no 3. Batch Degree 4. year of graduation 5. Present Job and Contact Details Searching access specified at the time of contacts filling like to be shown to friends only, class only batch only, all alumni. 6. Upload scan copy of Degree certificate (Later checked by the IAR Office and registration authenticated) 7. Ask their willingness to contribute 8. What information or help you need form IITH
Process	
Output	Dashboard for Alumni students
Interface	
Workflow Management	

Remarks	1. Create Account
	   a. FIRST NAME
	   b. LAST NAME
	   c. EMAIL (This will be your login email ID and password; you can add communication email later.)
	   d. PASSWORD
	   e. AFFILIATION
	2. Education
	   a. College
	   b. Year of Entry
	   c. Branch
	   d. Specialization
	3. Other Education
	   a. Institute/University Name
	   b. Degree
	   c. Field of Study
	   d. Specialization
	   e. Year of Entry
	   f. Year of Graduation
	4. Experience
	   a. Employer
	      i. Title
	      ii. Job Domain
	      iii. From Month, Year
	      iv. Currently working at
	      v. Add another Experience
	5. Accomplishments
	   a. Title
	   b. Description

	c. Add another Accomplishments
	6. Way to Give Back
	7. Contributions(options)
	   a. Monetary Support
	   b. Time Support
	   c. Tech Support

13 Extraction of information in the desired form

From the data/information available in the database, specific persons should be able to extract information in the desired form.

Module under Dean PCR (Other module)
Module for PRO Office (Other module)

Submodule for Annual Report Data

Input	1. Faculty Statistics - Office of Faculty
	2. Students Statistics - Office of Academic
	3. Research & Development - Office of R & D
	4. Patents, Publications & PhDs - Office of IP & Academic
	5. Placement & Internship - Office of Career Services
	6. Departments
	    a. Seminar Conducted
	    b. Research Highlights
	7. Individual Faculty (Unchanged data should be automatically picked by the system like data for point a. to e.). Also should have option for bulk upload
	    a. Name
	    b. Designation
	    c. Department
	    d. Place of PhD
	    e. Research Area
	    f. Patents Filed
	    g. Patent Granted
	    h. Book/ Book Chapters
	    i. Journals
	    j. Conferences
	    k. Projects
	    l. Awards & Recognition

Process	1. Data should be date driven 2. Every year the window will be opened between April to May for data entry 3. Faculty personal data can be interface with Office of Faculty
Output	Downloading of data in required format Doc/ Exce/PDFl
Interface	Different Section Like Academic, R & D, Faculty, IP Office, All Departments and All Faculty
Workflow Management	Individual sign-in and different level of authority
Remarks	There should be an option of making amendments at Admin Level. Templates will be provided for each window. Option of having automated reminders for different set of data upto delay in receiving the data.

Module for OCS Office (Other module)

Sub-Module 1 : Students' Corner - Internships

Input	Students Registration for Internships
Process	1. Registration Page for Internships 2. Creation of ID on Registration for Internships (No.) 3. Student Login for Internships 4. Filling of Personal Information(name, gender, caste, dob, address, ph no, mail id, pwd, etc) with Save, Edit option 5. Filling of Academic Details (data to be retrieved from Academic Office Database) 6. Upload Master CV before deadline 7. Email Notification of deadline for submission of Master CV 8. Create New CV 9. View the Companies job listings once the Master CV is verified 10. Notification of Open and close date & time for registration to individual companies 11. Registration for individual companies before deadline 12. Submit appropriate CV for listings from the CVs created 13. Uploading of Academic documents 14. Notification on successful registration (Registration status) 15. Notification of date & Time for PPT, Online Test, Interviews, etc. 16. Notification to shortlisted students 17. Notification to Final Selects 18. Notification to final selected students on submission of offer letters by Recruiters 19. Edit option to students to add / delete / modify any of the above before opening of registrations 20. Edit option to OCS in all aspects
Output	1. All students registered for Internship with complete details entered (profile) - **Academic year wise** 2. Students registered for Internships / individual companies branch-wise 3. Students registered for individual companies 4. Downloading of student resumes individually & all together 5. Require filter for the all to download report based on requirement
Interface	Academic office to give access to Student academic details
Workflow Management	Student - OCS - Recruiters

Remarks	-

Sub-Module 2 : Students' Corner - Placements

Input	Students Registration for Placements
Process	1. Registration Page for Placements 2. Creation of ID on Registration for Placements (No.) 3. Student Login for Placements 4. Filling of Personal Information(name, gender,caste,dob,address,ph no, mail id.. etc) with Save, Edit option 5. Filling of Academic Details (data to be retrieved from Academic Office Database) 6. Upload Master CV before deadline 7. Email Notification of deadline for submission of Master CV 8. Create New CV 9. View the Companies job listings once the Master CV is verified 10. Notification of Open and close date & time for registration to individual companies 11. Registration for individual companies before deadline 12. Submit appropriate CV for listings from the CVs created 13. Uploading of Academic documents 14. Notification on successful registration (Registration status) 15. Notification of date & Time for PPT, Online Test, Interviews, etc. 16. Notification to shortlisted students 17. Notification to Final Selects 18. Notification to final selected students on submission of offer letters by Recruiters 19. Edit option to students to add / delete / modify any of the above before opening of registrations 20. Edit option to OCS in all aspects
Output	1. All students registered for Placements with complete details entered (profile) - **Academic year wise** 2. Students registered for Placements / individual companies branch-wise 3. Students registered for individual companies 4. Downloading of student resumes individually & all together 5. Require filter for the all to download report based on requirement
Interface	Academic office to give access to Student academic details
Workflow Management	Student - OCS - Recruiters

Remarks	-

Sub-Module 3 : Recruiters' Corner - Internships

Input	Company Registration for Internships
Process	1. Registration Page for Internships 2. Creation of ID on Registration for Internships (IRF No.) 3. Company Login for Internships 4. Create Company Profile 5. Create Job Profile 6. Verification of registration by OCS 7. Notification for successful registration / partial registration 8. Notification to Recruiters when a Student Coordinator is assigned 9. After student registration for companies, companies can view the details of students registered for their company. 10. Companies can download the resumes of registered students 11. Upload of Shortlist, Waitlist, Final selects, offer letters by companies. 12. Notification of Interview slot 13. Logistic requirements 14. Upload documents, if any 15. Edit option to Recruiters to add /delete / modify any of the above before Verification of IRF by OCS 16. Edit option to OCS in all aspects
Output	1. All Companies registered for Internship with complete details entered (profile) - **Academic year wise** 2. Companies contact details year wise 3. Companies IRF details based on Degrees / Programs 4. Companies details based on nature of business 5. Downloading of companies IRF year wise individually & all together
Interface	-
Workflow Management	Recruiters - OCS - Students
Remarks	-

Sub-Module 4 : Recruiters' Corner - Placements

Input	Company Registration for Placements
Process	1. Registration Page for Placements 2. Creation of ID on Registration for Placements (ERF No.) 3. Company Login for Placements 4. Create Company Profile 5. Create Job Profile 6. Verification of registration by OCS 7. Notification for successful registration / partial registration 8. Notification to Recruiters when a Student Coordinator is assigned 9. After student registration for companies, companies can view the details of students registered for their company. 10. Companies can download the resumes of registered students 11. Upload of Shortlist, Waitlist, Final selects, offer letters by companies. 12. Notification of Interview slot to companies 13. Logistic requirements 14. Upload documents, if any 15. Edit option to Recruiters to add /delete / modify any of the above before Verification of ERF by OCS 16. Edit option to OCS in all aspects.
Output	1. All Companies registered for Placements with complete details entered (profile) - **Academic year wise** 2. Companies contact details year wise 3. Companies ERF details based on Degrees / Programs 4. Companies details based on nature of business 5. Downloading of companies ERF year wise individually & all together
Interface	-
Workflow Management	Recruiters - OCS - Students
Remarks	-

Sub-Module 5 : OCS Corner - Internships

Input	1. Student Registrations 2. Companies Registrations 3. Classroom Reservations 4. Internship Policy 5. Internship Calendar (upload, edit /update)

Process	1. Open & close deadline date and time for Company registrations and student registrations.
	2. Editing of any details of Students, IRF by Companies, etc.
	3. Verification of IRF submitted by companies
	4. Assigning of Student Coordinator to companies
	5. Enter dates of PPT, online test, Interview slots - viewable / notifiable to students and recruiters
	6. Uploading of any documents on behalf of students & recruiters
	7. View bookings / reservations / cancellation of classrooms for hiring process both Internships and Placements
	8. Edit option to OCS in all aspects
Output	1. Downloading of resumes, IRFs individually and all at once.
	2. Year wise Internship statistics
	3. Reports as per the user requirement
Interface	Academic Classroom reservation Module
Workflow Management	OCS - Recruiters/Students
Remarks	-

Sub-Module 6 : OCS Corner - Placements

Input	1. Student Registrations
	2. Companies Registrations
	3. Classroom Reservations
	4. Placement Policy
	5. Placement Calendar (upload, edit /update)
Process	1. Open & close deadline date and time for Company registrations and student registrations.
	2. Editing of any details of Students, ERF by Companies, etc.
	3. Verification of ERF submitted by companies
	4. Assigning of Student Coordinator to companies
	5. Enter dates of PPT, online test, Interview slots - viewable / notifiable to students and recruiters
	6. Uploading of any documents on behalf of students & recruiters
	7. View bookings / Reservations / cancellation of classrooms for hiring process both Internships and Placements
	8. Edit option to OCS in all aspects
Output	Downloading of resumes, ERFs individually and all at once.

	Year wise Placement statistics. Reports as per the user requirement
Interface	Academic Classroom reservation Module
Workflow Management	OCS - Recruiters/Students
Remarks	-

Module under Dean Planning (Other module)
Module for CMD Office (Other module)

Complaint Module (Other module)

Input	Complaint Registration for services supported by CMD
Process	1. Any user can register a complaint. 2. Allow login via Local User Accounts and/or Gmail Authentication. Allow IITH Users only in case Gmail Authentication. 3. Main page needs to contain the IITH Buildings/blocks/all CMD supported areas (provision to add any new blok can be provided) 4. Multiple options such as Floor number, room number etc needs to be populated Inside the selected building/block. 5. List of complaints category needs to be activated after the above selection. 6. Further sub-category lists need to be populated based on the category list. 7. Complaints list needs to be populated based on the sub-category. In addition to the list, Others(a text box for explaining) should be made available. 8. Options such as date & time for attending the complaint. 9. Additional Fields to collect user contact information. 10. Respective complaint needs to show the updated status from Admin Panel (i.e. completed/escalated for approvals) 11. A feedback needs to be made available upon successful complaint closure. 12. A survey form can be made available to take the monthly feedback. When selected a particular month, the list of complaints can be shown as a table with the current status. 13. The same complaint can be reopened and respective unique number needs to display the repeated count. (i.e. xxxx-1 if complaint reopened once, xxxx-2 if reopned twice, etc).

Output	1. After the completion of the above process, a unique number associated with complaint should be generated and it needs to send an SMS & Email to concerned user & Junior Engineer Concerned. 2. A PDF format of complaint needs to be available in the portal.
Interface	-
Workflow Management	User -> Concerned Junior Engineer
Remarks	

Admin Module (Other module)

Input	List of items that are available on User Module will be modified/created by Admin Module. This module can only be operated by Authorized Staff.
Process	1. All the values such as List of Buildings, List of categories, List of Sub Categories will be updated by Admin. 2. List of complaints needs to have a field specifying the nature of complaint. (i.e. Normal/Emergency/Re-Activated/Door Found Locked). 3. The above list may request an Approval of Respective Authority before going to be available to the User Module. 4. Functionality of Assigning any complaint to an employee needs to be provided. 5. Employee home page needs to contain the statistics regarding the assigned complaints/escalated complaints. 6. Statistics needs to take to the list of complaints upon clicking on the number/view complaints. 7. List of complaints can be shown in a tabular format with the available fields and information as columns and rows. Color code can be used for differentiating based on the type of complaint (i.e. Normal/Emergency/Re-Activated). 8. The employee can be given access to update the complaint details, which have already been provided by User. 9. Escalating based on the complaint nature needs to be provided. This should not conflict with Assigning complaint. 10. Closing of the complaint with a remarks field needs to be available.

	11. Each complaint/category needs to have time duration and upon expiration of the respective complaint's time, an alert Mail & SMS needs to be sent to the respective dealing employee and the respective In-Charge. 12. The time duration starts from the time of registering the complaint. 13. Updating the "Door Found Locked" status for thrice, the respective complaint will get closed. Access levels need to be configured, such as any employee should have access to their respective operating sections. (i.e. Junior Engineer Civil may have access to their area of operations and the same applies to Assistant Engineer. Executive Engineer and Superintending Engineer must be able to get the complete information.) A separate tab for viewing/editing details of Technicians.
Output	CMD Officials need to be provided with authority for updating the complaints. This can be provided in a dashboard with searching for specific categories of drop down fields. Additional search fields such as pending complaints, escalated complaints and etc.
Interface	-
Workflow Management	Workflow management will follow the escalation matrix of CMD (to be provided)
Remarks	