

Dr. N. G. P. INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Recognized by UGC, Accredited by NAAC with A+ & NBA (BME, CSE, ECE, EEE & MECH), Coimbatore-48.



Doc id#: NGPIT/ADC/IA/V1.4

Dr. NGPIT 2022. All rights reserved.

This document is meant for exclusive use of Dr.N.G.P.IT. No part of the document may be copied, reproduced, stored in any retrieval system, or transmitted in any form or by any means, electronically, mechanically, or otherwise without prior written permission.

Dr. NGP IT

Release History

| Sl. No | Released Version | Released by | Approved by |
|--------|---------------------|--|-------------------|
| 1 | V1.0 | Dr. V. Kumar Chinnaiyan, HoD-EEE | Dr. K. Porkumaran |
| 2 | V1.1 | Dr. G.Naveen Babu, HoD-EEE | Dr. K. Porkumaran |
| 3 | V1.2 | Dr.S.Jaganathan, HoD-EEE | Dr. K. Porkumaran |
| 4 | V1.3 | Dr.R.Karthikeyan, Controller of Examinations | Dr. K. Porkumaran |
| 5 | V1.4 | Dr.P. Sampath, Controller of Examinations | Dr.S.U.Prabha |

Assurance of Implementation by

| Version | Department | Represented by | Approved by | |
|---------|---------------------------|---|--|--|
| | Academic Development cell | Dr. V. Kumar Chinnaiyan | Der IV Developmenter | |
| V1.0 | Exam Cell | Mr. J. Sathish | Dr. K. Porkumaran | |
| | Academic Development cell | Dr. G. Naveen Babu | Dr. K. Porkumaran | |
| V1.1 | Exam Cell | Mr. J. Sathish | DI. K. FÜIKUIIIAIAII | |
| V1.2 | Academic Development cell | Dr.S.Jaganathan | Dr. K. Porkumaran Dr. K. Porkumaran | |
| V 1.2 | Exam Cell | Mr. J. Sathish | | |
| | Academic Development cell | | | |
| V1.3 | Exam Cell | Dr.R.Karthikeyan | | |
| | Academic Development cell | Dr.P. Sampath, Controller of Examinations | | |
| V1.4 | | Mr. J. Sathish, Deputy CoE | Dr.S.U. Prabha | |
| | Exam Cell | Mr.P.Janarthanan, Deputy CoE | | |
| | | Mr.P.Ashok Kumar, Exam Coordinator | | |





Ratification by

| Version | Department | Represented by |
|---------|---|----------------------|
| | Civil Engineering | Dr.P. Muthupriya |
| | Computer Science Engineering | Dr. D. Palanikkumar |
| | Electrical and Electronics Engineering | Dr.S. Jaganathan |
| | Electronics and Communication Engineering | Dr.P. Sampath |
| | Mechanical Engineering | Dr.S. Nandhakumar |
| V1.4 | Biomedical Engineering | Dr. M.G. Sumithra |
| | Information Technology | Dr.M. Krishnamoorthi |
| | Master of Business Administration | Dr.P. Saradhamani |
| | S &H | Dr. C. Vivekanandan |

Table of Contents

| HEADING | PAGE No. |
|---|-------------|
| Definitions | 4 |
| Objective | 4 |
| Scope | 4 |
| Responsibility | 4 |
| University regulations for internal assessment (Extract from Anna University) | 5 |
| Scheme of implementation for theory subjects | 7 |
| Preparation of question paper | 8 |
| Scheme of implementation for practical subjects | 11 |
| Retest for calculating internal marks | 12 |
| Review of internal marks | 13 |
| Work flow chart of policy | 13 |
| Disclaimer | 15 |





Policy Details – Internal Assessment

1. Definitions and Nomenclature

University means Anna University, Chennai.
Institute means Dr. N.G.P. Institute of Technology.
Program means program of study.
Principal means the head of the Institution.
Convener means the convener of academic development cell (ADC).
In charge means the staff deputed as in charge of the ADC.
HoD means head of the department in Dr. N.G.P. Institute of Technology.
Faculty means the teaching staff of the institute.
Students means undergraduate and postgraduate students studying in Dr. N.G.P. Institute of Technology

2. Objective

To ensure uniformity in awarding the internal marks throughout the institute.

To provide step by step solution in the process of internal assessment.

To ensure transparency in awarding internal marks to students.

To ensure strict adherence to scheme of continuous assessment as laid down by University.

3. Scope of the policy

This policy is applicable to all faculty of the institute unless specified. This policy will be implemented to all students admitted to the program affiliated to University.

ADC Convener is the owner of this policy and responsible for reviewing the policy time to time based on the needs of the University regulations and Institute needs. Any clarification regarding the program must be routed to the ADC Convener. This policy supersedes previous policy, old communication and old regulations with immediate effect.

4. Responsibility

| Designation | Responsibilities/Authority matrix |
|---------------|---|
| Principal | Final appellate authority for review of marks.Final approval authority for ratification of this document. |
| Convener | Responsible for formulating internal assessment schemes. Responsible for conducting of internal assessment procedures. Responsible for release and update of academic Schedule. Responsible for conducting result analysis. Responsible for providing final internal marks. |
| ADC In charge | Responsible for coordination and overseeing the internal exams with exam cell committee. Responsible for coordination with various departments in collecting result data. |





- Responsible for providing documents (not limited to the following: question papers, invigilator list, mark list etc.,)
- Responsible for implementing the ADC policy as guided by the convener.

5. University regulations for internal assessment (Extract from Anna University)

As per regulations of Anna University Regulations – 2021

- For all theory courses, the continuous *internal assessment* will carry 40 marks while the End Semester University examination will carry 60 marks.
- For all theory courses with laboratory component, the continuous internal assessment will carry 50 marks while the End Semester University examination will carry 50 marks.
- For all laboratory courses, the continuous internal assessment will carry 60 marks while the End Semester University examination will carry 40 marks.
- The continuous internal assessment for the project work will carry 40 marks while the End Semester University examination will carry 60 marks.

Theory Courses

Two internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

Laboratory Courses

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 are as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Theory Courses with Laboratory Component

If there is a theory course with laboratory component, there shall be two assessments: the first assessment (maximum mark is 100) will be similar to assessment of theory course and the second assessment (maximum mark is 100) will be similar to assessment of laboratory course respectively. The weightage of first assessment shall be 40 % and the second assessment is 60 %. The weighted average of these two assessments shall be converted into 50 marks and rounded to the nearest integer.

Project work

The student shall register for Project Work-I in pre-final semester and Project Work-II in final semester. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. Project Work-II may/may not be a continuation of Project Work-I. If Project Work II is not a continuation of Project Work I, then the topic and constitution of the project team members need not be the same.





The Head of the Institutions shall constitute a review committee for Project Work for each programme. The review committee consists of supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of Industrial Project, the review committee shall have the supervisor, the coordinator from industry and the project coordinator from the Department. There shall be three reviews during the semesters VII and VIII by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 40 marks and rounded to the nearest integer.

| Derrierus | Darriaru | Derrierus | | End semester Examinations | | | |
|-------------|--------------|---------------|------------------------|---------------------------|----------|-------------|------------|
| Review I | Review II | Review III | Thesis Submission (20) | | | Viva-Voce (| 40) |
| | | | | | Internal | External | Supervisor |
| 10 | 15 | 15 | Internal | External | | | |
| | | | 10 | 10 | 10 | 20 | 10 |

If a student fails to submit the project report on or before the specified deadline or the student has submitted the project report but did not appear for the viva-voce examination, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.

As per regulations of Anna University Regulations - 2017

For all theory and practical courses (including project work) the continuous assessment shall be for a maximum of 20 marks. The above continuous assessment shall be awarded as per the procedure given below:

Theory Courses

Three tests each carrying 50 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all tests put together out of 300, shall be proportionately reduced for 20 marks and rounded to the nearest integer (This also implies equal weightage to all the three tests).

Laboratory Courses

The maximum marks for Internal Assessment shall be 20 in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 20 are as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be reduced to 20 and rounded to the nearest integer.

Theory Courses with Laboratory Component

If there is a theory course with Laboratory component, there shall be three tests: the first two tests (each 50 marks) will be from theory portions and the third test (maximum mark 50) will be for laboratory component. The sum of marks of first two tests shall be reduced to 60 marks and the third test mark shall be reduced to 40 marks. The sum of these 100 marks may then be arrived at for 20 and rounded to the nearest integer.



Project Work

Project work may be allotted to a single student or to a group of students not exceeding 4 per group. The Head of the Institutions shall constitute a review committee for project work for each branch of study. There shall be three reviews during the semester by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 20 marks and rounded to the nearest integer (as per the scheme given in 5.1).

The project report shall carry a maximum 30 marks. The project report shall be submitted as per the approved guidelines as given by Director, Academic Courses. Same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 50 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

| Derrieur Derrieur | | Derrierur | End semester Examinations | | | | |
|-------------------|--------------|---------------|-------------------------------------|----------|----------|----------|------------|
| Review I | Review II | Review III | Thesis SubmissionViva-Voce (50)(30) | | | 50) | |
| | | | | | Internal | External | Supervisor |
| 5 | 7.5 | 7.5 | Internal | External | | | |
| | | | 15 | 15 | 15 | 20 | 15 |

If a candidate fails to submit the project report on or before the specified deadline, he/she is deemed to have failed in the Project Work and shall re-register for the same in a subsequent semester.

6. Scheme of implementation for theory subjects

To implement the University guidelines as per the regulations 2017 and 2021, this policy outlines different proposal as following.

The schedule of internal exams will be communicated by the ADC-convener at the start of the semester in the academic schedule. Academic schedule is subjected to revision based on the communication from University. Academic schedule must be strictly followed without missing deadline.

R2017

| Test | Duration | Maximum Marks | Syllabus coverage |
|-------------------------|----------|------------------|---|
| Internal Test 1 (IT1) | 1.30 hrs | 50 | UNIT 1 (100%) UNIT 2(50%) |
| Internal Test 2 (IT2) | 1.30 hrs | 50 | UNIT 2 (50%) UNIT 3(100%) UNIT 4(50%) |
| Internal Test 3 (IT3) / | 1.30 hrs | 50 | UNIT 4 (50%) UNIT 5(100%) |
| Model exam | 3 hrs | 100 | ALL UNITS (As per University Pattern) |





| Test | Duration | Maximum Marks | Syllabus coverage |
|---|----------|------------------|--|
| Internal Test 1 (IT1) | 2 hrs | 60 | UNIT 1 (100%) UNIT 2 (100%) UNIT 3 (50%) |
| Individual Assignment / Case Study / Seminar / Mini Project | - | 40 | UNIT 1 (100%) UNIT 2 (100%) UNIT 3 (50%) |
| InternalTest 2 (IT2) | 2 hrs | 60 | UNIT 3 (50%) UNIT 4 (100%) UNIT 5 (100%) |
| Individual Assignment / Case Study / Seminar / Mini Project | - | 40 | UNIT 3 (50%) UNIT 4 (100%) UNIT 5 (100%) |
| Model exam | 3 hrs | 100 | ALL UNITS (As per University Pattern) |

7. Preparation of question paper

This policy outlines the setting of question paper for tests IT1, IT2 & IT3. Faculty will set the question paper as provided below under monitoring from exam cell representatives.

- Faculty will set their question paper only in the desktops provided in the ADC QP- Setting room.
- Faculty will carry only the text books while setting the question paper. On demand, question bank will be provided to the required faculty by the ADC in-charge.
- While entering or exiting the exam strong room, no loose papers will be carried in/out.
- HoD will prepare subject expert list for question paper setting and will send the same to the ADC.

• Allotted Faculty members will prepare question papers as per the format circulated by ADC.

• Once the question paper is typed, the head of the department or his designated academic co-ordinator will scrutinize the question paper (soft or hard) for mapping of Course outcome level, Blooms taxonomy action verbs, grammatical errors, logical errors, clarity of questions, typeset of questions, feasibility of completing the said question paper within stipulated time etc.,

- After verification, question paper will be duly signed by the HoD.
- Random check will be conducted by Principal or his designated authority, if so desired.
- Quality of question paper will be ensured by HoD and will be monitored by Principal.
- Course handling faculty is responsible for preparing the answer key.



• Faculty while entering to question paper setting room in ADC, he should sign in the entry exit log maintained.

• Carrying digital storage devices such as USB, CD, hard drives during the setting of question paper is prohibited.

- Faculty must complete the question paper setting process before the deadline as mentioned in the academic schedule. To ensure unbiased internal assessment system a systematic structure (Figure .1) is followed centrally by the Academic development cell (ADC).
- Question papers are audited at the end of the semester by internal experts to verify and validate the process benchmark

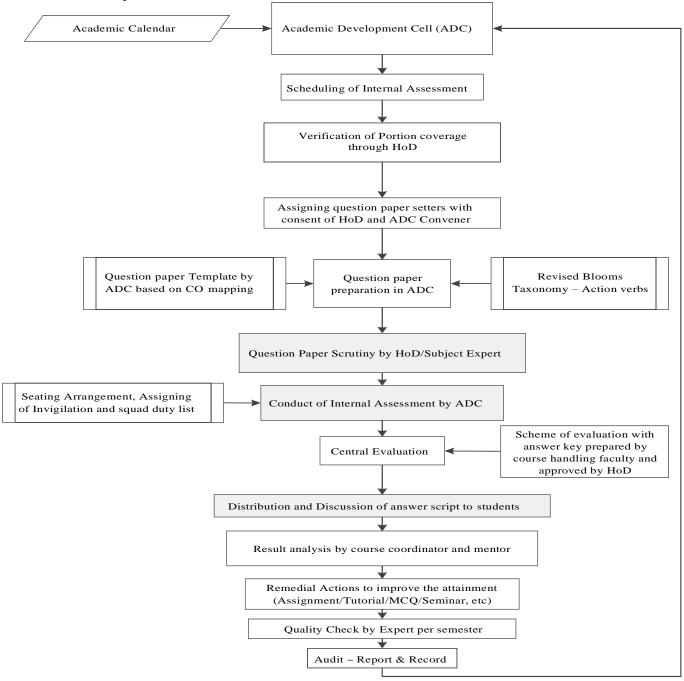


Figure.1 Process for Question Paper Setting





Conduct of examination

- Immediately after the deadline to submit question papers, Principal or his designated authority may instruct for printing the question paper as per the requirement.
- The procedure for conduct of exam, inviting invigilators will be as per the *conduct of examination policy*.
- Principal, convener or the designated authority has the right to decide on issues arising at the time of examinations.
- A squad consisting of HoDs and senior faculty members of all the departments is constituted for smooth conduct of internal examinations.

Method of evaluation

- Immediately after the end of the examination, respective faculty will submit an answer key with clearly indicated mark awarding schemes to their respective HoD's / ADC coordinator. On completion of the specified exam, the answer scripts will be deposited at the strong room for evaluation.
- ADC will inform the concerned subject handling faculty regarding the readiness of answer scripts with answer keys for evaluation.
- Once evaluated, the marks will be entered in the mark list template provided in campes software.
- The concerned subject faculty will collect the answer sheet from ADC and distribute to students in their respective classes.
- Any changes in the evaluation will be done and updated mark list will be submitted to HoD.
- After verification, the mark list will be forwarded to class advisors by HoD.
- Class advisors will submit the consolidated mark list to ADC after preparing the soft copy of the approved mark list and will complete the subject wise result analysis for a particular class.
- The date of completion of the evaluation will be intimated in the circular which is generally 3 days after the last date of completion of the respective exam.

Result analysis and report submission

- The class advisors along with HoDs will submit the departmental performance file year wise in a consolidated mark list as per the format.
- Result analysis meeting with HoDs should take place within 5 days of the last day of examination.
- Result analysis meeting with management will be conducted immediately thereafter. Any scope for performance improvement will be discussed and policy decisions will be taken.
- If any discrepancies in the result published, may be brought to the notice of the ADC convener for necessary action. These marks are used for awarding the internal marks in the respective subjects as described in the university regulations.
- The department test coordinators should ensure the entry of test marks and attendance percentage in the Anna University's CoE Portal on time in coordination with the ADC incharge.



Declaration of Marks to Students

- After each examination, when the answer sheets are distributed to the students, concerned faculty will display the marks obtained by the students.
- After due correction and verification, the consolidated list will be sent to the ADC for records and class advisors will make entry to the University portal when the time is due as notified by the University.
- Finally, students before facing the University end semester exams the cumulative total of internal assessment marks obtained by the students will be displayed.

8. Scheme of implementation for practical subjects awarding of internal marks for laboratory:

(a) Awarding 75 marks

- Faculty will conduct prescribed experiments regularly and will award marks out of 10 for each experiment.
- Cumulative total of all experiments will be converted to 75.
- The mark list out of 75 will be filled as per the format in annexure VII. This document will be verified and approved by Hod.
- The approved mark list will be sent to ADC convener on the last working day of the academic session.

(b) Awarding of 25 marks

• Awarding of 25 marks for the tests will be based on a) mid semester lab exam, b) mini project and c) end semester model exam. The division of the marks is as given in the table below:

| LABORATORY ASSESSMENT PLAN | | | | | |
|--|--|----------|----------|--|--|
| Day to Day performance - Average wt. 75% | Evaluation method | 10 marks | 75 marks | | |
| Mid semester | Model exam – I | 10 marks | | | |
| assessment lab – | Model exam – II | 10 marks | 25 marks | | |
| Average wt. 25% | Mini project / VALUE virtual lab experiments | 5 Marks | | | |
| Internal marks by assess | 100 marks | | | | |
| External marks | 100 marks | | | | |
| End semester university R2017(80% External ma marks and 60% Internal | 100 marks | | | | |

Mid semester lab exam and end semester model lab exam component (out of 10) will be conducted for a maximum of 100 marks with following components.

Dr. NGP IT

| Components | Marks |
|--|-------|
| Performance of the experiment during exam | 50 |
| Viva | 25 |
| Writing part (Theory, Observation, diagram etc.,) | 25 |



- The obtained 100 marks will be converted to 10 for mid semester exam and end semester model exam.
- The mini project evaluated for 100 will be converted to 5.
- If a student is absent for mid semester exam due to cases listed in section 9.1, retest will be conducted immediately after his return with the approval of HoD.
- The retest mark will be communicated to ADC by departmental coordinator.
- The internal marks out of 100 will be evaluated as per the following distribution of the marks.

| Sl.No | Item | Marks (100) |
|-------|-----------------------------------|-------------|
| 1 | Day to Day performance (as 7.1a) | 75 |
| 2 | Mid semester lab Exam (as 7.1b) | 10 |
| 3 | Mini project (as 7.1b) | 5 |
| 4 | End semester lab exam (as 7.1b) | 10 |

• The total marks out of 100 will be converted to 20 and will be sent to the academic convener with approval of Hod's for records and portal entry.

Conduct of examination

- The mid semester exam and end semester model lab exam will be conducted by the respective faculty involved in the course.
- Evaluation of the mini project/ value virtual lab experiments will be done by the respective faculty involved in the course.

Method of evaluation

- The mid semester exam and end semester model lab exam will be evaluated by the faculty concerned and will be responsible for completion of section 7.1 **Result analysis**
- Consolidated lab marks that include marks (75+10+10+5) will be sent to the ADC before the start of the theory University exams for records purpose.
- The consolidated marks will include the retest cases (as mentioned in 9).
- The consolidated lab marks will also include the result analysis as followed in ADC. **Final internal marks calculation**
- Final internal marks for the lab course will be consolidated as per the format by the class advisor and will be entered in the web portal as per the directions of Principal.
- Copy of consolidated mark list will be sent to ADC for records.

9. Retest for calculating internal marks

- Under normal circumstances, the institute will not conduct any retest for any missed component of internal marks except the following cases:
- Medical emergency cases of the student/ parent/ siblings leading to admission in to the hospital.
- Loss of life by a family member of a student.
- Any other cases as admitted for hearing by the Principal.
- Student will submit an annexure for retest as per format immediately after returning to the Institute.

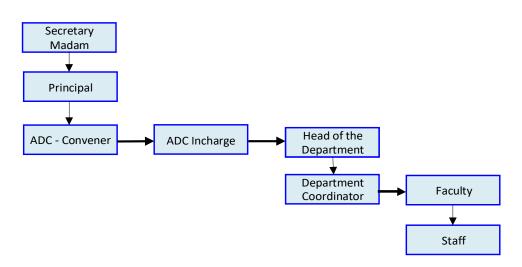


- In cases mentioned in 9.1, for theory courses a make-up examination will be held immediately after the return of the student to the institute.
- In cases mentioned in 8.1, for practical courses a make-up practical mid sem examination will be held immediately after the return of the student to the institute.
- A fresh set of experiment lot will be prepared for the student to pick and perform. The marks obtained by the student as a result of retest will be communicated to ADC through HoD.
- Retest application submitted two days after the last day of leave will be summarily rejected and is binding on the student to follow.

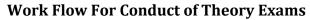
10. Review of internal marks Report submission

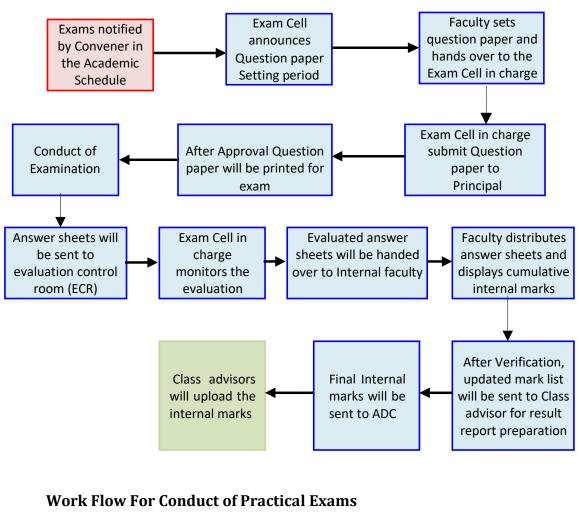
- ADC will submit the following documents to the Principal before the start of vacation period.
- List of subjects that were conducted in the semester along with the faculty name.
- Subject wise internal marks entered in the University portal.
- Consolidated Result Analysis
- Department wise result analysis will be prepared with the help of departmental coordinators.
- Important observations will be discussed with the Principal, Director S&H and HoD's
- The consolidated report will be placed before the management for review and further action.
- 11. Work flow chart of policy

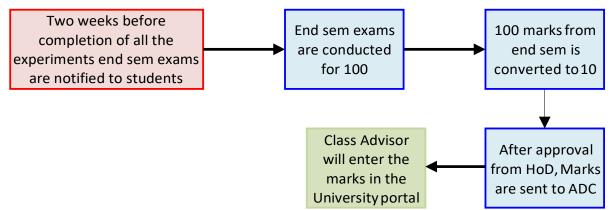
Organizational structure of ADC





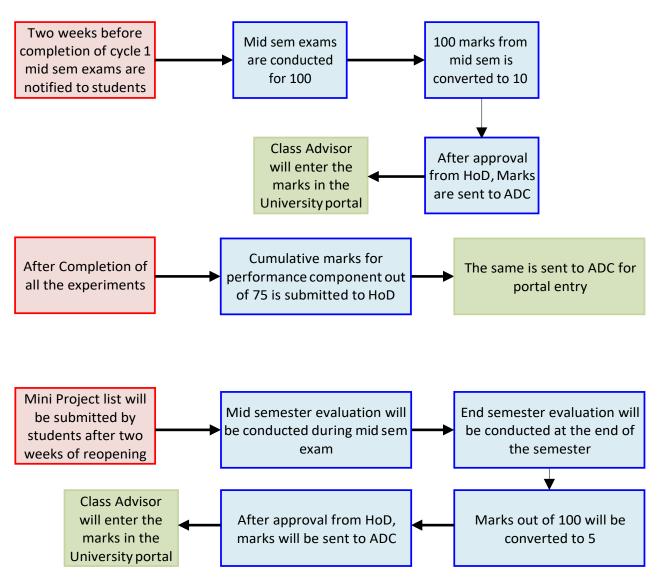












12. Disclaimer

The policy is intended to streamline the existing practices, bring in transparency and making the system of internal assessment accountable. This policy document is not bylaws. This owner of this policy has the right to change terms without prior notice. No part of this document will be available for circulation in soft form. One copy of hard spiral bound copies will be placed in each department for reference. This policy document does not claim completeness of the information herein. The directions provided are on the basis of past experience, guidance by different stakeholders of the Institute.

Dr. NGP IT



15