

GOVERNMENT COLLEGE OF ENGINEERING AMRAVATI

(An Autonomous Institute of Govt. of Maharashtra) "Towards Global Technological Excellence"

Phone: 0721-2531930 Fax: 0721-2531931

Website: www.gcoea.ac.in Email: principal@gcoea.ac.in



Date: 01/09/2023

Action Taken

With regard to suggestions/observation from the action taken on the minutes of IQAC meeting held in July 2022

Sr	Suggestions/ Observations	Actions Taken
1	Item No.5 Status of Extension of autonomy	Action completed. 1] The letter of extension of autonomy [! No.F 2-1 0/2023(AC-Policy] Dtd 31 May 2023 is received by the institute on 20 Jun 2023.
2	Item No 8 Need effort & facilitation of Startup activity Faculty and students should be motivated to avail funding for IPR and publications NIRF Ranking and Marks	Action completed Report is included in Annexure –II The NIRF Score sheet is received and weak matrices is being studied for improvement
. 3	Item No 9 Need Corrective steps to improve R&D Faculty should be asked to publish articles in UGC approved journals only	Action is completed in terms of implementation of R & D Policy of the institute. Report is included in Annexure –II
4	Item No 11 Expressed the need of keeping the Institute website updated	Action Completed



Principal
Government College of Engineering
Amravati

Action Taken Report-IQAC Meeting

Point No 8

1) Need Efforts and facilitation of start-up

The institute has prepared and implemented the GCOEA Innovation and Start-Up Policy 2022 in line with the National Innovation and Start-Up Policy 2019, where financial, administrative, and mentoring support are provided to the start-up by the students.

A start-up named Able Innovation has developed Hearing aid devices in the institute, and the institute has provided an initial grant of Rs 240000.00. This start-up has won many awards on national and international platforms and has also received grants for the development of prototypes from IIT Mandi and IIT Kanpur.

The Start-up and R&D Policy is attached for reference

2) Faculty and students should be motivated to avail for funding for IPR

The Research and development policy for the faculty and students has been prepared, approved by the financial committee and BOG of the institute, and implemented. In that policy, for the motivation of faculty and students to participate in various R&D-related activities, Rs 20000.00 allocated for Research Publication in SCOPUS or SCI journals / conferences. A similar provision of Rs. 3000.00 was made for the students. Other than this, various incentives and funds are provided for seed money, book purchases, IPR, and visits to R&D institutes.

To motivate the students regarding IPR, a workshop was arranged on 18/01/2023 by Mrs. Pooja Vishal Maulikar, Examiner of Patents and Design, Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) Nagpur for the students where in 111 Students (UG,PG and Ph.D.) and 7 Faculty Members were participated

Key outcome of the activity: The outcome of the activity is given below

- 1) Students got Awareness about Intellectual Property Rights (IPR)
- 2) Basic Concept of IPR
- 3) Types of IPR and its significance
- 4) Information required for filling the patents
- 5) Procedure to convert research outcome into patents
- 6) Patents specification structure

- 7) Documents required for filling
- 8) Various fees for filling Patents





This year institute has filed 6 utility patents









Government College of Engineering, Amravati.

(An Autonomous Institute of Govt. of Maharashtra)

In association with

Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM)

Government of India, Nagpur (Under National Intellectual Property Awareness Mission)

PRESENTS

Online Workshop on Intellectual Property Rights (IPR) Patents & Design filing

Expert for the session



Mrs. Pooja Maulikar

Examiner of Patents & Designs, Rajiv
Gandhi National Institute of Intellectual
Property Management (RGNIIPM),
Nagpur.

Date: 18 January, 2023 (Wednesday)
Time: 3:00PM To 4:00PM

Venue: Online



(Scan & Register for online workshop.)

Dr.A.M.Mahalle Principal & President (IIC) Dr.R.M.Metkar Dean (R&D) & Convenor (IIC) Dr.M.V.Jape IPR-Activity Coordinator (IIC)

CONTACT US:

Swaraj Chavan (9673665497) Khushee Deshmukh (8010808414) [Student Representatives - IPR Activity]

Note: E-certificates will be given to all participants from NIIPM who attended the workshop.

Point No 9

1) Need Corrective steps to improve R&D

The various steps has been initiated for the faculty to undertake research related activities and sufficient fund was allocated in this year budget and incentive was also incorporated in R&D Policy.

2) Faculty should be asked to publish articles in UGC approved journals only. Minimum one Scopus publication should be made compulsory for the PG Students.

The institute has a policy regarding the publication of articles in reputed journals or conferences, which may be UGC-approved, SCOPUS-indexed, etc. The registration fee and TA/DA will be provided to those faculty who have published articles in UGC-approved journals or SCOPUS conferences.

One SCOPUS publication has been made compulsory for the PG Students.

3) Incubation Center should be established.

The Establishment of Incubation centre is in process.









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GCOEA Innovation & Start up Policy 2022

Ref: National Innovation and Start up Policy 2019 (Ministry of Education, Govt. of India.)



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No: GCOEA/R&D/Startup policy/2022/ 20

Date: 20/12/2022

GCOE Amravati Innovation & Start Up Policy

Preamble: The Government College of Engineering (GCOEA) Innovation and Start-up Policy-2022 have been formulated by a team of faculty members associated with IIC on the guidelines of **National Innovation and Start up Policy 2019 given by Ministry of Education, Govt. of India.** In NISP these guidelines were drafted by Expert Team which will facilitate Ministry of Human Resource Development in bringing uniformity across HEIs in terms of IPR ownership management, technology licensing and institutional startups policy, thus enabling creation of a robust innovation and Startup ecosystem across all HEIs. These guidelines will also help emphasize that the entrepreneurship is all about creating a business, which is financially successful. GCOEA Innovation and Start-up Policy-2022 which is in line with **National Innovation and Start up Policy 2019** will help students and faculties to undertake various innovative projects, IPR, Startup, New Idea generation etc.

a) Strategies and Governance

- 1) Entrepreneurship promotion and development should be one of the major dimensions of the HEIs strategy. The Entrepreneurship Cell shall be constituted at the institute level with defined specific objectives and different awareness program shall be arranged periodically to increase awareness and opportunity for Entrepreneurship development.
- 2) Investment in the entrepreneurial activities should be a part of the institutional financial strategy. Minimum 10 Lac. fund of the annual budget of the institution should be allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'.
- 3) The strategy should also involve raising funds from diverse sources to reduce dependency on the public funding. Bringing in external funding through government (state and central) such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, etc. and non-government sources should be encouraged.
- 4) To support technology incubators, academic institutes may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
- 5) Institute may also raise funding through sponsorships and donations. Institute should actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).
- 6) Importance of innovation and entrepreneurial agenda should be known across the institute and should be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc.
- 7) Institute should develop and implement I & E strategy and policy for the entire institute in order to integrate the entrepreneurial activities across various centers, departments, faculties, within the institutes, thus breaking the silos.

b) Startups Enabling Institutional Infrastructure

Creation of pre-incubation and incubation facilities for nurturing innovations and startups in GCOEA institution should be undertaken. Incubation and Innovation need to be organically interlinked. Without innovation, new enterprises are unlikely to succeed. The goal of the effort should be to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

- 1) GCOEA Planning to create facilities within their institution for supporting pre-incubation (e.g. IICs as per the guidelines by MHRD's Innovation Cell, EDC, IEDC, New-Gen IEDC, Innovation Cell, Startup Cell, Student Clubs, etc.) and Incubation/ acceleration by mobilizing resources from internal and external sources.
- 2) This Pre-Incubation/Incubation facility should be accessible 24x7 to students, staff and faculty of all disciplines and departments across the institution.
- 3) Pre-incubation facilities may or may not be a separately registered entity or Special Purpose Vehicle (SPV), but we recommend that 'Incubation cum Technology Commercialization Unit'(ITCU) should be a separate entity preferably registered under Section-8 of Company Act 2013 or 'Society' registered under Society Registration Act with independent governance structure. This will allow more freedom to Incubators in decision making with less administrative hassles for executing the programs related to innovation, IPR and Startups. Moreover, they will have better accountability towards investors supporting the incubation facility.
- 4) GCOEA may offer mentoring and other relevant services through Pre-incubation/Incubation units in-return for fees, equity sharing and (or) zero payment basis. The modalities regarding Equity Sharing in Startups supported through these units will depend upon the nature of services offered by these units and are elaborately explained in Section 3.

c) Nurturing Innovations and Start ups

- a) GCOEA is expected to establish processes and mechanisms for easy creation and nurturing of Start ups/enterprises by students (UG, PG, Ph.D.), faculty, alumni and potential start up applicants even from outside the institutions.
 - b. While defining the process, GCOEA will ensure to achieve following:
 - i. Incubation support: Offer access to pre-incubation & Incubation facility to start ups by students, staff and faculty for mutually acceptable time-frame.

In case GCOEA doesn't have a dedicated facility/ infrastructure of its own, then it may reach out to nearest incubation facilities in other HEIs in order to facilitate access to their students, staff and faculty.

- ii. Will allow licensing of IPR from GCOEA to start up: Ideally students and faculty members intending to initiate a start up based on the technology developed or codeveloped by them or the technology owned by the GCOEA, should be allowed to take a license on the said technology on easy term, either in terms of equity in the venture and/ or license fees and/ or royalty to obviate the early stage financial burden.
- iii. Will allow setting up a start up (including social start ups) and working part-time for the start ups while studying / working: HEIs may allow their students / staff to work on their innovative projects and setting up start ups (including Social Start ups) or work as

intern / part-time in start ups (incubated in any recognized HEIs/Incubators) while studying / working. Student inventors may also be allowed to opt for start up in place of their mini project/ major project, seminars, summer trainings. The area in which student wants to initiate a start up may be interdisciplinary or multi- disciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the start up.

- c. Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the institute to register their company with due permission from the GCOEA.
- d. Students entrepreneurs should be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the GCOEA.
- e. Allow faculty and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the institute) as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back as per **Govt. of Maharashtra leave rule**. GCOEA should consider allowing use of its resource to faculty/students/staff wishing to establish start up as a fulltime effort..
- f. GCOEA will facilitate the startup activities/ technology development by allowing students/ faculty/ staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:
 - i Short-term/ six-month/ one-year part-time entrepreneurship training. ii Mentorship support on regular basis.
 - ii Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product-costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.
 - iii GCOEA may also link the startups to other seed-fund providers/ angel funds/ venture funds or itself may set up seed-fund once the incubation activities mature.
 - iv License institute IPR as discussed in section 4 below.
- g. In return of the services and facilities, GCOEA may take 2% to 9.5% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided and use of institute's IPR (a limit of 9.5% is suggested so that institute has no legal liability arising out of startup. The institute should normally take much lower equity share, unless its full-time faculty/ staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed-funds, support for accounts, legal, patents etc.
 - For staff and faculty, institute can take no-more than 20% of shares that staff / faculty takes while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares, listed above.
- h. Institute could extend this startup facility to alumni of the institute as well as outsiders.
- i. Participation in start unrelated activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must

be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.

4. Product Ownership Rights for Technologies Developed at Institute

- a. When institute facilities / funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by inventors and the GCOEA.
- i. Inventors and GCOEA could together license the product / IPR to any commercial organization, with inventors having the primary say. License fees could be either / or a mix of
- 1. Upfront fees or one-time technology transfer fees
- 2. Royalty as a percentage of sale-price
- 3. Shares in the company licensing the product
- ii. GCOEA may not be allowed to hold the equity as per the current statute, so SPV may be requested to hold equity on their behalf.
- iii. If one or more of the inventors wish to incubate a company and license the product to this company, the royalties would be no more than 4% of sale price, preferably 1 to 2%, unless it is pure software product. If it is shares in the company, shares will again be 1% to 4%. For a pure software product licensing, there may be a revenue sharing to be mutually decided between the institute and the incubated company.
- b. On the other hand, if product/ IPR is developed by innovators not using any institute facilities, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product/ IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.
- c. If there is a dispute in ownership, a minimum five membered committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the institute's alumni/ industry experts (having experience in technology commercialization) and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. Institute can use alumni/ faculty of other institutes as members, if they cannot find sufficiently experienced alumni / faculty of their own.
- d. GCOEA IPR cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If institute is to pay for patent filing, they can have a committee which can examine whether the IPR is worth patenting. The committee should consist of faculty who have experience and excelled in technology translation. If inventors are using their own funds or non-institute funds, then they alone should have a say in patenting.
- e. GCOEA decision-making body with respect to incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department / institute will have no say, including Principal, heads of department, Deans Administrative Officer

f. Interdisciplinary research and publication on startup and entrepreneurship should be promoted by the institutions.

5. Organizational Capacity, Human Resources and Incentives

- a. Institute should recruit staff that have a strong innovation and entrepreneurial/ industrial experience, behaviour and attitude. This will help in fostering the I&E culture.
- i. Some of the relevant faculty members with prior exposure and interest should be deputed for training to promote I&E.
- ii. To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff should be developed with constant up skilling.
- b. Faculty and departments of the institutes have to work in coherence and cross-departmental linkages should be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.
- c. Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills which are not available internally.
- d. Faculty and staff should be encouraged to do courses on innovation, entrepreneurship management and venture development.
- e. In order to attract and retain right people, GCOEA should develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
- i. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.
- ii. The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships, etc.

6. Creating Innovation Pipeline and Pathways for Entrepreneurs at Institute Level

- a. To ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market, mechanisms should be devised at institution level.
- i. Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability should be a part of the institutional entrepreneurial agenda.
- ii. Students/ staff should be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs should innovate with focus on the market niche.
- iii. Students should be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.),

by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, boot camps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized.

- iv. To prepare the students for creating the start up through the education, integration of education activities with enterprise-related activities should be done.
- b. The GCOEA should link their start ups and companies with wider entrepreneurial ecosystem and by providing support to students who show potential, in pre-startup phase. Connecting student entrepreneurs with real life entrepreneurs will help the students in understanding real challenges which may be faced by them while going through the innovation funnel and will increase the probability of success.
- c. The GCOEA should establish Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities. IICs should guide institutions in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts should be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.
- d. For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.
- i. Provide business incubation facilities: premises at subsidised cost. Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new startups.
- iii. A culture needs to be promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and return. While funding is taking risk on the entrepreneur, it is an obligation of the entrepreneur to make every effort possible to prove that the funding agency did right in funding him/ her.

7. Pedagogy and Learning Interventions for Entrepreneurship Development

- a. Diversified approach should be adopted to produce desirable learning outcomes, which should include cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery.
- i. Student clubs/ bodies/ departments must be created for organizing competitions, boot camps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability.
- ii. GCOEA should organized department level annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute.
- iii. For creating awareness among the students, the teaching methods should include case studies on business failure and real-life experience reports by startups.

- b. Entrepreneurship education should be imparted to students at curricular/ co-curricular/ extracurricular level through elective/ short term or long-term courses on innovation, entrepreneurship and venture development. Validated learning outcomes should be made available to the students.
- i. Integration of expertise of the external stakeholders should be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.
- ii. In the beginning of every academic session, departments should conduct an induction program about the importance of Innovation & Entrepreneurship (I&E) so that freshly inducted students are made aware about the entrepreneurial agenda of the institute and available support systems. Curriculum for the entrepreneurship education should be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.
- iii. Industry linkages should be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.
- iv. Sensitization of students should be done for their understanding on expected learning outcomes.
- v. Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based.
- vi. Customized teaching and training materials should be developed for startups.
- vii. It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader, who would convert an innovation successfully into a product, others may join the leader and work for the startup. It is important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take risk.
- c. Pedagogical changes need to be done to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by the institutes for inculcating entrepreneurial culture should be constantly reviewed and updated.

8. Norms for Faculty Startups

- a. For better coordination of the entrepreneurial activities, Only those technologies should be taken for faculty startups which originate from within the same institute.
- i. Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.
- ii. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- b. Faculty must clearly separate and distinguish on-going research at the institute from the work conducted at the startup/ company.
- c. In case of selection of a faculty start up by an outside national or international accelerator, a maximum leave (as sabbatical/ existing leave/ unpaid leave/ casual leave/ earned leave) of one semester/ year (or even more depending upon the decision of review committee constituted by the institute) may be permitted to the faculty as per Govt. of Maharashtra Leave rule with prior permission from higher authority.

- d. Faculty must not accept gifts from the startup.
- e. Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa.
- f. The institute will provide grant in aid of Rs 100000.00 to each start up by the faculty subject to scrutiny by the committee set by the principal on the basis of uniqueness and patentability. If further grant in aid is required then, detailed proposal with justification shall be forwarded to Principal appointed scrutiny committee consisting internal expert from related field.

9. Policies for the Students

- i. The GCOEA will allow students to set up a start-up (including social start-ups) or work part-time for a start-up, while studying. Students can work on their innovative projects and set up start-ups (including social start-ups), or work as intern / part-time in start-ups (incubated in the Institution), while studying.
- ii. Student entrepreneurs may earn credits for working on innovative prototypes /Business Models. Students can earn 6 credits by working on Innovative Prototypes/Business models as per institute curriculum
- iii. Student inventors are allowed to opt for start-up in place of their mini project/ major project, seminars, summer training. The area in which a student wants to initiate a startup may be interdisciplinary or multidisciplinary. However, students must delineate how they will demarcate and clearly distinguish their ongoing research activities as a student from the work being conducted at the start-up.
- iv. Students who are under incubation but are pursuing some entrepreneurial ventures while studying are allowed to use their address in the Institution to register their company, with due permission from the institution.
- v. Student entrepreneurs are allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the Institution.
- vi. If a student is working on Innovative prototypes/business models that can be patentable or leading to a start-up, he/she can earn 6 credits per semester for as per institute policy.
- vii. Student entrepreneurs may avail a semester break/year break to work for their start-up (or even longer, depending upon the decision of the Review Committee constituted by the Institution) and rejoin academics to complete their course. Student entrepreneurs may earn academic credits, for their efforts while creating an enterprise. Institution shall set up a Review Committee for review of start-ups by students, and based on the progress made, it may consider giving appropriate credits for academics
- vii. The institute will provide grant in aid of Rs 100000.00 to each start up after checking the uniqueness, patentability of idea by R&D scrutiny committee. If further grant in aid is required then, detailed proposal with justification shall be forwarded to Principal appointed scrutiny committee consisting internal expert from related field.



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No: GCOEA/R&D/2022/4585 Date:- 08/12/22

Faculty Empowerment Schemes/Policy - R&D (November 2022)

(With effect from 01 December 2022)

Preamble: The Faculty is the most important stakeholder of an institute. While students spend their four years in the institute, by large teacher spends 30 -40 years with the institute. Empowerment of faculty is an empowerment of the student. While investment on empowerment of a student is recurring the investment on the empowerment of faculty gives long term Returns. Institutions need to ensure continuous value addition of each and every faculty. To encourage this Following schemes/policies are framed for various activities under the broad umbrella of faculty empowerment R&D

1. Participation in conference/ Seminar / Workshop/ Exhibition/ Technical festival /FDP/ training program/ STTP/CEP etc. (organized by Centrally funded institutions, State funded institutions and other institutions in the category of NIRF of 1 to 200 ranking.

The faculty members are encouraged to participate in the quality conferences arranged by the institute of repute, Central Government Institute, State government funded institutions and other institutions in the category of NIRF of 1 to 200 ranking.

Faculty members publishing/ presenting papers in the conference, workshop, Congress etc. will be reimbursed total expenditure toward this which includes permissible travel expenses, stay arrangement, permissible dearness allowance and registration fee. Every faculty will be supported for this. The faculty members (who are not authors) but interested in attending this prestigious conference will also be supported at actual expenses. The Principal may accord sanction to the additional conference/ event for a particular faculty as a token of appreciation to work as a valuable contribution of an individual to the institute. Maximum allowed expenditure will be Rs 20000.00 per person per financial year.

Every faculty deputed for external event shall submit a report and give a brief seminar in the department to the colleagues/ students regarding the event/ topic/ paper

International conferences (Organized in other countries) of repute (SCOPUS/SCI/ Well reputed publisher) such support shall be extended once in every 2 years. For International event, that support will be limited to rupees 1,50,000/-. Faculty Willing to present a research paper at international events outside the country should apply with due Recommendation of the HoD to Dean R&D. Institute level committee will scrutinize the application and will make recommendations to the Principal. The proposal will be placed in the forthcoming BoG meeting. After approval of the proposal will be forwarded to the Government for necessary sanctions.

After the approval from the Government only, then the faculty should proceed. However the faculty applying for the support should make possible attempts to fetch external support from various Central and state funding Agencies such as AICTE, SGBAU, UGC DST, DoT, BARTI, SARTHI etc. Every faculty for deputed for such external events hall submit a report and give an open talk in the institute inviting on faculty/ students

2. Professional membership of Technical society such as IET, IEEE, ASME, ASCE, IE (I), IETE, CSI, ASM, any other society recommended by the respective HoD.

Every Faculty will be encouraged to be a member of the professional societies in their respective domain. Institute will support at actual of the membership fees every financial year for every faculty **maximum limit up to Rs. 10000.00.** Faculty will take only Life membership of professional bodies.

3. Assistance for registering Patent/ Copyrights/ IPR etc.

The IPR and Patents have become very important in today's context for any higher education institute, in particular the technical educational Institute. The faculty need to be encouraged to innovate the thing. Attempts to be made to make them more innovative and creative. Projects, mini projects give students and faculty the opportunity to work together on new ideas. It may lead to the start of entrepreneurship. To encourage innovative work of the faculty 100% financial support to word the expenses incurred in registering the new ideas of patent will be provided by the institute. Application in this regard to be forwarded through the head of the department. Institute level committee under Dean R&D will evaluate these within a week. This committee will consist of 5 members across the institute covering broadly all domains of learning. The committee will meet once in every month and scrutinize the proposal scrupulously. Based on the merit of the proposal Decision will be made whether to extend the financial support or not. Financial support extended will be 100% of total expenses covering the entire stages such as (finding the patent, first examination, response to all queries, all the government fees and official charges of patent attorney, charges towards certificate of award of paper. The patent will be property of the institute. It will be in the name of the institute. The faculty will be the author for the patent.)

This entire procedure to be completed through the agency with which the institute has signed the MOU for filling the patents/copyrights/ trademarks etc.

4. Assistance for Industrial visits/ Reputed Institute for R&D

Faculty Members are encouraged to visit the Industry/Reputed Institute and will be financially supported for this activity. Every faculty will be supported once in every year for a maximum of 5 days. The Permissible traveling and dearness allowances and permissible expenses toward stay will be reimbursed at actual.

5. Organization of Seminar/ Workshop/ Conference under R&D

Faculty/ Department interested in the organization of events will make a detailed proposal to the Dean (R&D). The institute level committee will scrutinize the proposal and make its recommendation to the principal. If the amount requested is below Rs 100000, the Principal will accord the sanction to the proposal. Other proposals will be placed in the BoG meeting for sanction. However the interested faculty should use this support as a seed money and fetch external funding from various state and central funding agencies such as DTE, AICTE, SGBAU, UGC and industries. One event per department per semester will be supported by the institute. If there are more proposals, the department will prioritize and recommend only one proposal in one semester.

6. Support for Purchase of books.

Teachers are expected to refer to good quality learning material. Teacher is expected to refer several world class books while preparing for the course to be taught. This is a continuous process and demands the Awareness of recent Publication and literature. To facilitate every teacher encouraged to procure the books. **Financial support of 75% of actual amount** spent on the books **limited to Rs. 5000 per year** will be extended to every faculty member

7. Research Support to Faculty

The faculty will be supported by seed money of Rs.200000 for the research project to begin/to continue the journey of research. This will enable the faculty to continue the research work after joining the institute. The faculty will write a research proposal which will be scrutinized by the departmental committee specially constituted by the head of the department for this purpose. The departmental approved proposal will be forwarded to Dean (R&D) and Principal for recommendation. After recommendation the proposal will be placed in the forthcoming BoG meeting for sanction. Faculty will be eligible for this support only once in his career.

8. Assistance for enrolment for MOOCS courses

Open learning platforms such as NPTEL/ Swayam, Coursera, edX etc. offer great learning opportunities for today's learner. This is the enriching education, content beyond syllabus. Courses beyond structure, Interdisciplinary courses can be studied on this platform from the best universities in the world. The best teachers of these universities make such courses available to the worldwide learners. Anytime, anywhere and at the individual pace are very distinctive and attractive features of these courses.

There are often more than 500 courses on NPTEL/ Swayam platform. Many of these courses are live courses and offered semester to semester. IITs also take Procter examinations and offer certificates to the students who have successfully completed the registered courses. All the faculty in the institute are encouraged to register for these courses and increase the bandwidth of the learning. To facilitate these, every faculty will be supported to the tune of at actual registration fee for such MOOCS courses from any platform. Teachers are expected to

register for the courses related to new technology, interdisciplinary courses and other value addition courses. Every Faculty will be supported to register for one course per semester.

If any expenditure excluding of above policy, decision will be taken by the Principal on the Recommendation of R&D committee

ALL FACULTY ARE APPEALED TO TAKE MAXIMUM BENEFIT OF THESE SCHEMES

Principal

08/12/22

Government College of Engineering Amravati



GOVERNMENT COLLEGE OF ENGINEERING AMRAVATI

(An Autonomous Institute of Govt. of Maharashtra)

"Towards Global Technological Excellence"

Phone No. 0721-2531930 (Principal) 2531929 (Office) Fax: 2531931

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स्वातंत्र्याचा अमृत महोत्सव

No: GCOEA/R&D/2022/ 4585 Date: 08/12/2-2

Students Empowerment Schemes/Policy - R&D (December 2022)

(With effect from 01 December 2022)

This policy is for the regular, on roll bonafide student of the institute

1. Participation in Conference/ Seminar/ Workshop/ Exhibition/ Technical Festival etc. (Organized by Centrally funded institutes, State funded Institute, TEQIP funded Institution and other institutions in the 200 bracket of ranking by NIRF)

To encourage the student to take part in the International / National Conference, seminar, workshop, technical exhibition, technical festivals, common technical competitions such as Tech fest, Mind spark etc. financial assistance shall be provided by the institute. Any UG/ PG Student of the institute can avail such assistance once in a year and maximum twice in his/ her program of study. This assistance shall include registration fee limited to Rs.3000/- per student per year or the actual expenditure incurred whatsoever is less. The student shall be entitled for T.A. as per Institute norms

This assistant will be provided only for those students who are participating in the event in the form of presenting the paper, exhibiting the projects, giving the technical talk, attending a technical quiz, participation in technical contest etc. Student need to apply in the prescribed format along with necessary documents viz. participation certificate and tickets for the expenses for this assistance s after the event duly recommended and signed by the faculty coordinator/Project guide/ supervisor for the dissertation/ research Guide to HOD. The HOD needs to forward this application to Dean R&D with clear comments. The Dean R&D will study the document and will then decide the amount to be reimbursed.

2. Assistance for registering Patent/ Copyrights/ IPR etc.

The IPR and Patents have become very important in today's context for any higher education institute, in particular the technical educational Institute. The students need to be encouraged to innovate the thing. Attempts to be made to make them more innovative and creative. Projects, mini projects give students the opportunity to work together on new ideas. It may lead to the start of entrepreneurship. To encourage innovative work of the students, assistance at an actual cost involved in registering the new ideas, patents will be provided by the institute.

The patents to be registered should be in the name of the student on roll and the faculty from this Institute. The application in this regard will be forwarded by the student through Guides if any and the Head of the department. Institute level committee under Dean R & D will evaluate this within a week. This committee will consist of 5 members across the institute covering broadly all

domains of learning. The committee will meet once in every month and scrutinize this proposal scrupulously. Based on the merit of the proposal a decision will be taken whether to extend the financial support or not. Financial support extended will be at actual expenses covering entire stages such as filing the patents, first examination, cross examination, response to the Queries, all government fees and official charges of patent attorney charges towards the certificate of award of patent etc.

This entire procedure to be completed through the agency with which the institute has signed the MOU for filling the patents/copyrights/ trademarks etc.

3. Assistance for Industrial visits

Industry Association/ Partnership/ Interaction have become the Paramount importance in the modern time. Institutions are expected to strive hard for the possible interactions with industries on all fronts. AICTE strongly advocate the need for industry interaction. Industrial visit, industry sponsored real life projects enrich the learning. Students need to be encouraged and supported to participate in such activities. Departments are expected to arrange an industrial visit at least as per the curriculum so that every student will visit Industries during his/her program. To facilitate this, financial support will be extended to the students participating in such activities.

For industrial visit (as per curriculum) a support in the form of travel allowance will be extended for every student. Short tour that is less than three days once in every semester and long tour more than 3 days once in every year for third year and fourth year shall be permissible and reimburse as per the T.A policy of R&D and entry fee/ registration fee/ incidental charges extra if any during the visit shall be reimbursed at actual.

4. Participation In house and External Technical Training Program

The continuous and ever increasing Technology disruption necessitates the need of learning beyond the curriculum. Similarly the skill required by the industry needs to be inculcated among the learners. Institutions are expected to arrange the training program in Frontier areas, high take skill development etc. Centrally funded Institutions, State funded Institutions, TEQIP funded Institutions and any other institutions in the 200 bracket of ranking by NIRF are regularly arranging such training programs. Beside these several industries and Institutions arrange training programs for the students. Students are encouraged to participate in such a training program whenever possible to increase their knowledge base and to be employable in highly demanding market space. A financial support 50% of the registration fee or Rs. 4000/-whatsoever is lower will be extended to the regular student once during the program of study. Beside this travelling expense as per the T.A.policy will be also extended.

5. Assistance for Research Flavoured Project/Dissertation

Projects, Dissertation give opportunities for the students to innovate, design, fabricate, experiment on different ideas. Students enjoy learning by doing this. Students need to be encouraged to work on Industrial relevant hardware projects than limiting on simulations. Innovative project work may also lead to a useful laboratory set up. Students are supported for such attempts. Interested students write a brief proposal giving the background problem statement, budget and phases of execution to the department. At the department level such a

proposal will be scrutinized thoroughly and recommended for support accordingly. The institute level committee under Dean R&D will take the decision for extending such support. Financial assistance up to 75% of actual cost incurred (for experimental setup in the form of fabrication, components, consumable etc.) shall be reimbursed based on the availability and the allocation of the budget limited to Rs. 10000/- per dissertation/ project per year. For special cases on Recommendation of Dean R&D and subsequent approval from the Principal, this support can be extended up to Rs. 50000/- for special projects of Institute interest. The support shall be extended to PG dissertations or UG project (Minimum group of four students). There will be annual exhibition at Institute level demonstrating these supported projects and an award in the form of certificate and medal will be given to the best project/ dissertation of the Year

6. Assistance for Enrolment for MOOC's Courses

Open learning platforms such as NPTEL, Coursera, edX offer great learning opportunities for today's learner. This is the enriching education, content beyond syllabus. Courses beyond structure, Interdisciplinary courses can be studied on this platform from the best universities in the world. The best teachers of these universities make such courses available to the worldwide learners. Anytime, anywhere and at the individual pace are very distinctive and attractive features of these courses. Many Institutions and Universities have started to formally accept the credit on by the students from open learning platforms. There are often more than 400 courses on NPTEL/ Swayam platform. Many of these courses are live courses and offered semester to semester. IITs also take Procter examinations and offer certificates to the students who have successfully completed the registered courses. All the students in the institute are encouraged to register for these courses and increase the bandwidth of the learning. To facilitate these, every student will be reimburse to the tune of 75% of actual registration fee for maximum Rs. 2000/whichever is the less for NPTEL courses and 50% of registration fee on maximum Rs. 2000/whichever is the less for the courses on EDX/ Coursera/ etc. and other platform on successful completion. This support shall be extended to maximum one course per semester per student and maximum for 4 courses during B.Tech and 2 courses during M.Tech.

7. Assistance for Specific Competition

The institute students are attending a few competitions regularly year after year. This competition is to provide a skill development platform for the students. The scale and the vigour to compute are also transferred from batches to batches. To promote these group activities the institute allocates a budget in each financial year. The activities include SAE Baja, SAE Tifan, Robotics, E cell etc., or any other Team decided by the department on National Level competition

The selected group of student shall be entitled to

- a) Full registration fee
- b) T.A admissible as per rule
- c) Accommodation and food charges levied based on the charges by organizing Institute and approved by the concerned committee limit to Rs. 600 per day per student.

8. Travelling allowance policy for student (serial number 1, 3 and 4)

In order to promote research and development the institution supports partial/full travel expenses of the students in addition to above mentioned support for different activities enlisted. The travel grant shall be as follows

a) Student shall be reimbursed (non AC) Bus or Railway Sleeper Class tickets (without Tatkal charges) by shortest route on the submission of Proofs/ tickets

b) When partially or fully bus / rail connectivity is not available, with prior permission of the principal Rs 1/- per km per student for unconnected portion shall be payable on submission of Proofs.

If any expenditure excluding of above policy, decision will be taken by the Principal on the Recommendation of R&D committee

ALL STUDENTS ARE APPEALED TO TAKE MAXIMUM BENEFIT OF THESE SCHEMES

Principal OS/12/22

Government College of Engineering

Amravati