

ARAYBHATTA KNOWLEDGE UNIVERSITY, PATNA, BIHAR

Collaborative Research and Innovation Program (CRIP) Under TEQIP-III

Objectives

The objective of Competitive Research and Innovation Program (CRIP) is to promote collaborative research among the faculty members and technical institutes affiliated/associated to Aryabhata Knowledge University, Patna. This program will provide the financial assistance through TEQIP-III fund for creating and updating the general research capabilities among the institutes for build research communities, collaboration and networking among different institutions, enhancement in research outputs and sharing and spreading the knowledge and skills. The proposal should include title of the project, profile of applicants/co-applicants and name of their institutions, research credentials, need of the present research, objectives, social relevance, methodology, action plan, financial requirement, expected outcome (in terms of SCI indexed publications, development of innovative product/process, industry of social relevance technologies etc.). A detailed Research Proposal Submission form is attached along with this CRS document.

Eligibility

- a) The collaborative institutes must be an affiliated/constituent Institute/Research Center of the University.
- b) The investigators should be a regular faculty member of affiliated/constituent Institute/Research Center of the University with research experience and quality publications.
- c) The basic research facilities should be available in the institute.
- d) At least **TWO** or maximum **FOUR** institutes can be considered for one proposal under Collaborative Research and Innovation Program for financial support.
- e) Only **ONE** proposal will be sanctioned to one principal investigator at any point of time within the duration of project.
- f) The institution to which PI belongs will be called the lead institution. One Co-PI should be from the lead institutions and the proposal shall be led by Principal Investigator and Co-Principal Investigator of the lead institution and others will be network institutions (One Co-Principal Investigator from each network institutions).

Above are the minimum eligibility criteria for application under this program (CRIP). However, a screening committee will be constituted by the University for Review and selection of proposals.

Proposal Evaluation

A proposal will be primarily evaluated on the following criteria:

- Quality / relevance of the area proposed.
- Potential to significantly advance knowledge, patentability, novelty and / or create impact on society.
- Joint strength of the teams.
- Proposed outcome & deliverables.
- Available and complementary experimental infrastructure in the institutions (for such kinds of projects).

Duration of Project

Duration of the project will be **ONE** year from the date of receipt of funds in the institutes account.

Focus Areas

1. Artificial Intelligence and Cognitive Science
2. Machine learning
3. Renewable energy and its integration
4. Advanced Manufacturing
5. Mechatronics
6. Advanced Electronics and Communication
7. Nanotechnology
8. Cyber security
9. Technologies for Swachh Bharat
10. Energy and Water Sustainability
11. Transportation and Smart Infrastructure
12. Robotics and Embedded Systems
13. Future of Earth: Green and Renewable Technologies
14. Technology Enhanced Education and Learning, including Assistive Technologies
15. Agricultural and Food Sustainability
16. Technologies for Rural and Women Empowerment

Limit of funding

- a) Total funding may not exceed Rs.3.0 Lakh per project (150 Lakh for total 50 projects). Head-wise permissible limit per project is indicated in below table,

S.No.	Description of Expenditure Head	Ceiling amount (INR)	Remark
1	Consumables relevant to proposed research proposal	1,00,000.00	
2	Travel for research activities only (including accommodation& fooding)	50,000.00	Travel grant within country as per prevailing Bihar state government rules
3	Patenting/Registration fee for Conference/ Seminars /Workshops/Training programme	40,000.00	
4	Outsourcing related to research work (i.e. Prototyping/Fabrication/Testing /Characterization/Calibration etc.) and Software	1,00,000.00	
5	Project Contingencies	10,000.00	

- b) The first installation (One fourth of the total project value) shall be transferred to the lead institution (through PFMS) in advance and remaining fund will be released subsequently on reimbursement basis after producing Utilization Certificate (UC) issued from competent authority of the lead institute.
- c) TEQIP-III rules would be applicable for payment/reimbursement.
- d) The release of subsequent grant, after first installment, shall be on the basis of submission of Utilization Certificate (UC) with certified copy of expenditures. There, will be a midterm review of each project after 6 months from the release of the first installment.
- e) The reimbursement claim and settlement of bills shall be submitted to the University within 90 days after release of first installment and subsequently the bills for remaining amount of sanctioned grant shall be claimed on quarterly basis for reimbursement to the University. Failing which the claim may not be processed for reimbursement.
- f) Release of last installment/ last reimbursement (may be 15-20% of the project cost) shall be subject to submission of the report (three copies) to the University.

Terms and conditions

- a) The Principal Investigator of lead institution has the primary responsibility for the implementation of the project to meet the desired objectives.
- b) If the Principal Investigator of Collaborative Research and Innovation Program joins another institution of AKU, Patna, then AKU, Patna will have no objection to transfer the project if No Objection Certificates are obtained from both the parent Institute and the Institute where the Principal Investigator intends to join.
- c) In case the PI (Principal Investigator) and Co-PI (Co-Principal Investigator) of lead institutes leave the Institution without transfer of the project or goes on long leave, then Co-Principal Investigator of network institutes would be allowed to continue with the project, subject to the consent of the Principal Investigator in case of long leave and approval of AKU, Patna. All such requests should be sent to Research Committee, AKU, Patna in advance. Therefore, association of Co-Investigators in the project is desirable.
- d) In case the Principal Investigator of lead institutes leaves the Institute and there is no other associated Co- Investigator to carry out the project, then Head of the Department should take the responsibility for identifying a competent person in the Institution in the relevant subject area and submit his/her bio-data to the Research Committee, AKU, Patna for further consideration.
- e) The grant will be utilized strictly for the purpose as specified in the sanction letter. Reappropriation of funds from one head to another is strictly not permitted.
- f) Once the project is sanctioned, the Research Committee, AKU, Patna shall not consider any request for additional grant.
- g) Separate institutional overheads for execution of the project shall not be provided by AKU.
- h) Partial funding from any other source(s) for the proposed research project is not allowed under this scheme.
- i) The project grant can be utilized in the Lab consumables, outsourcing and Contingency.
- j) Out of the project grant, no funds can be used for going abroad to attend Conferences/ Seminars. However, for presenting a paper in a Seminar/Conference (including the registration fee, accommodation, fooding and travel grants as per prevailing Bihar State Government rules) within the Country may be met from the grant.

Expected Outcomes:

1. Research paper (One SCI/SCOPUS indexed paper)/ Patent
2. Consortium/Research group formation