

Establishment of Centres for Training and Research in Frontier areas of Science and Technology (FAST) – revised format.

1. Salient Features of a Center under FAST

- The Centre of Excellence (CoE) is expected to be a collaborative activity between a team of high quality researchers in the institution and researchers or research-users in several companies or organizations. In case where the nature of research is related to production or improvement of public goods, collaboration may include appropriate public agencies.
- The Centre should focus on new and emerging technologies, multi-disciplinary and translational research relevant to national development goals
- Priority will be accorded to multidisciplinary research like biomedical engineering, nuclear engineering, materials engineering, geotechnical engineering, applied sciences and training in new and emerging technologies that contribute to important sectors such as energy, water, environment, health, waste management & pollution, sustainable development, disaster mitigation, infrastructure and defence.
- Funding can be considered for new as well as existing centre of excellence for training and research (except those already considered under this scheme or TEQIP-II) for value addition or achieving next levels of research.
- The Centre is expected to trigger an R&D culture in the institution as evidenced by significant increase in applications of research outputs, collaborative and sponsored research, publications in reputed national/international journals and conferences, patents, innovations, commercialized products and Masters and PhD enrolments.

2. Selection

The proposals will be evaluated on the basis of following criteria:

Criteria
▪ Overall proposal implementation feasibility in terms of choice of area and its relevance to the national development goals.
▪ Institutional preparedness and collaboration.
▪ Reasonability of proposed budget.
▪ Multidisciplinary.
▪ Technological development and translation into proto types / patents/publications.

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| <ul style="list-style-type: none"> ▪ Scaling-up PhD and Masters Enrolment in the identified areas. |
| <ul style="list-style-type: none"> ▪ Insuring sustenance of Centers after the end of the project. |

3. The following activities are envisaged under the center

- a. Improvement in research and development facilities:
 - i. Procurement of Goods [equipment & software] and minor infrastructure for improvement in research and development facilities.
 - ii. Procurement of components and sub systems.
 - iii. Project Staff: A significant part of these could also be required for MS/ PhD program.
 - iv. Part-time consultants.
 - v. Testing and Prototype development.
 - vi. Data collection, dissemination and documentation,
- b. Coordinated work with other research institutes in India/abroad,
- c. Capacity development ,
- d. Seminars, conferences workshops, and IEC(information, education and communication),
- e. Seed grant: Small seed grant to researchers to venture into new directions within the specified theme.

Activity	Project Life Estimates	Financial Year 2013-14	Financial Year 2014-15	Financial Year 2015-16	Financial Year 2016-17
a.					
b.					
c.					
d.					
e.					
Operation & Maintenance etc					
Total					

Outline for Project Proposal

1. Background of the area including

- a. Status of technology at the world level.
- b. Status of technology in India.
- c. Indian Industry interest/ participation in the areas.

2. Research team background short summary of researcher in institute and possible collaborates from industry and other academic institution.

3. Centers activities and how these activates:

- a. Could make India a world leader in the area.
- b. Could make social impact.

4. Yearly budget for staff, equipment, consumables, Travel and contingency.

Selection Process:

- (i) Short-listing by experts and, if required,
- (ii) Presentation before the Steering Committee chaired by Secretary (HE) to approve the proposal.

Format for application

A. <u>General</u>		
1.	Name of the Institution/ Location	
2.	Type of Institution/ Year of establishment	Central Government Institutions/ State Government Institution/Govt. aided institutions /Private unaided (UGC/AICTE approved)
3.	Recognition of excellence	Award, Publication, Patent, Citation, National International partnership with institution of excellence in or related to the research area proposed.
4.	Total Students	UG :
		PG:
		Research:
5	Total Faculty	Sanctioned Strength:
		Filled:
		% of Faculty having Ph.D in Science and Technology / Engineering:
6.	Annual Budget/Expenditure	
7.	Any other	
B. <u>Proposal parameters & Institutional Capacity</u>		
1.	Name of the centre to be established	
2.	Thematic Area of the proposed centre	
3.	Total Project Estimate:	
	Proposed fund from present scheme:	
	Gap funding:	

4.	National Development Goal (as indicated in the advertisement)	
	In the Existing COE addressed?	
	In the Proposed COE, how will be addressed?	
5.	Sustainable Development	
	Existing COE: How does it promote?	
	Proposed COE: How will it promote?	
6.	Quality of faculty in terms of credentials and achievements to be associated with the centre.	
7.	No of MS /PhD likely to work in the proposed centre.	
8.	Basic Infrastructure: Buildings, Labs, Equipments etc.	
9.	National/ International collaboration for the proposed centre (funding), (if any)	Available:
		Proposed:
10.	Collaboration & Partnerships	
	Existing COE:	
	Proposed COE:	
11.	Contacts:	COE Coordinator, Address /mail ID/mobile/ tel. no./fax no.