INDIAN HIGHER EDUCATION - QUEST FOR EXCELLENCE



A Compendium of Flag-Ship Programmes of UGC



University Grants Commission
New Delhi

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Website: www.rougecommunications.org Email: rougecommunications@gmail.com

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University Grants Commission

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Preamble

Higher education in India has recorded impressive growth since Independence. University Grants Commission (UGC), by designing programmes and implementing various schemes through academic, administrative and financial support, has contributed in no small measure to the growth and development of Indian higher education. This has been done in keeping with constant commitment of both the Central and State governments towards the establishment of institutions fostering a competent human resource required for the social, economic and ethical development of the nation.

In discharge of its cardinal function of coordinating and maintaining standards of higher education, over the years, the UGC has evolved a wide variety of programmes for realization of the goals of higher education. Some of these programmes have assumed 'Flag-Ship' status as they not only focus on individual students, teachers, researchers, socially vulnerable groups, thematic priorities in teaching and research and institutions of higher learning ranging from Departments and Colleges to Universities. In keeping with its objective of bringing this progressive qualitative improvement to the higher education landscape in the country, the UGC has launched these 'Flag-Ship' programmes. Several compensatory interventions for marginalized sections of the society for enhancing their participation in higher education have been a special concern of these initiatives with a view to promoting social equity. Establishment of Inter-University Centres has provided a fillip to making high-end research facilities and support to the Indian higher education system. Recently, the UGC has decided to launch an inspirational intervention through the establishment of Chairs in honour of Nobel Laureates who have done our country proud.

The following pages of this brochure have captured certain glimpses of the 'Flag-Ship' programmes of the UGC. The presentation that follows will help the Commission as well as academia to identify possible regional imbalances, gaps in thematic focus as also the strengths and weaknesses of these programmes. It shall be the Commission's endeavor to harness the indentified strength, channelize its resources and direct its efforts towards overcoming the perceived inadequacies.

It is noteworthy that through these programmes the Commission has supported a large number of students, teachers and institutions of higher learning with a view to achieving excellence in variegated domains of knowledge.

I trust all the stakeholders will find this brochure fruitful.

New Delhi

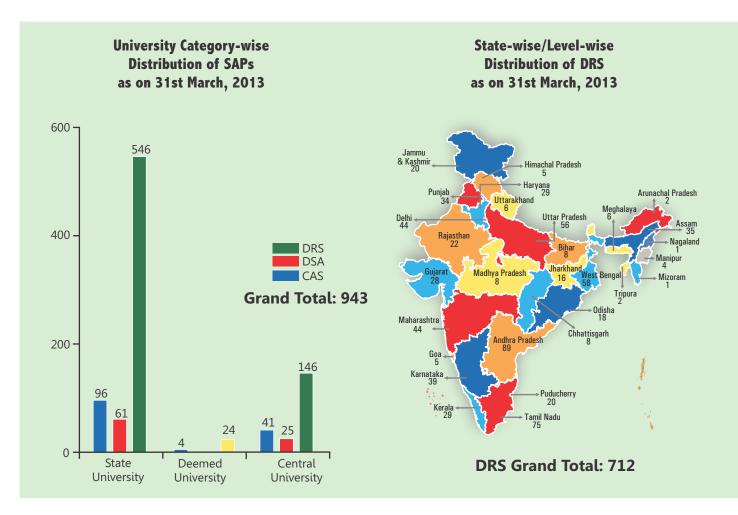
June, 2013

Ved Prakash

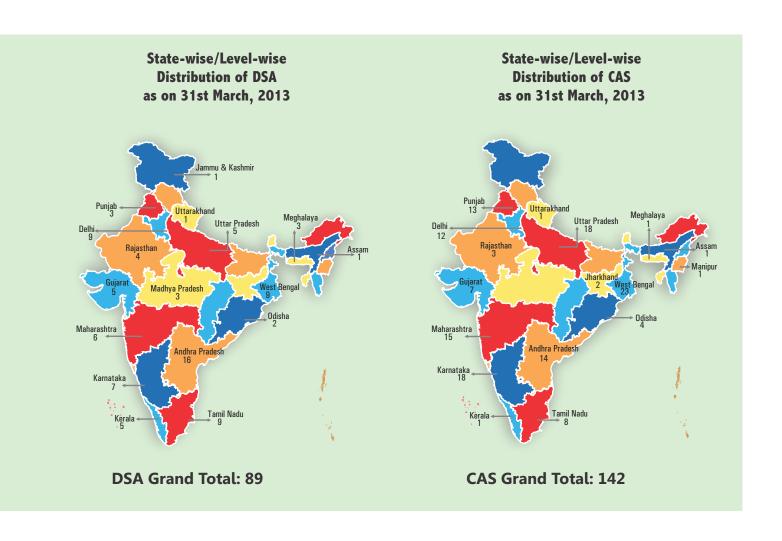
Chairman, UGC

Special Assistance Programme (SAP)

The scheme aims at promoting research in all domains of knowledge. The institutions of higher learning under the scheme, are supported at three different levels namely Department Special Assistance (DSA), Departmental Research Support (DRS) and Centre for Advanced Study (CAS). The UGC is supporting as many as 943 departments of them, 712 are being supported at the level of DRS, 89 at the level of DSA and 142 at the level of CAS.



For details, please visit http://www.ugc.ac.in/oldpdf/xiplanpdf/sap270409.pdf



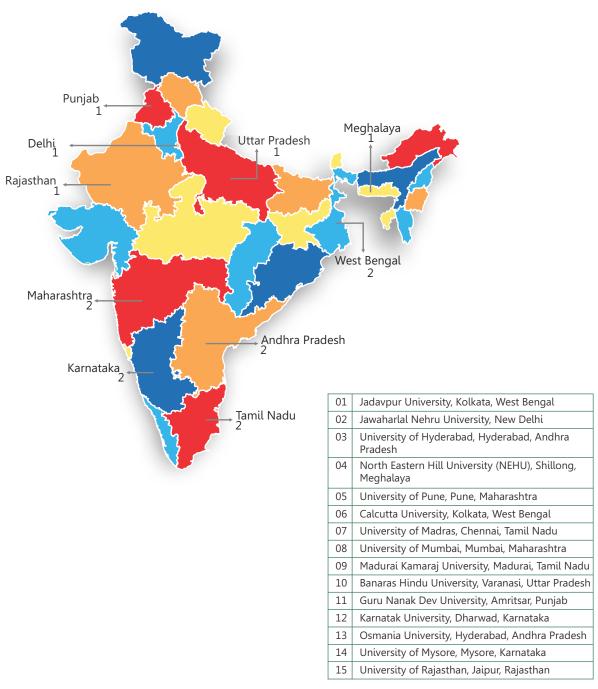
Universities with Potential for Excellence (UPE)

The UGC assists selected Universities with a vision to achieve excellence in teaching and research by conferring on them the status of 'Universities with Potential for Excellence (UPE)'. Such institutions are eligible for enhanced funding to augment their academic and research infrastructure and also to evolve innovative approaches towards the teaching-learning process. The UGC has, so far, conferred the status of Universities with Potential for Excellence to as many as 15 Universities. Each University is supported with an additional grant of ₹ 100 crore spanning over two phases.



For details, please visit http://www.ugc.ac.in/oldpdf/xiplanpdf/upe290409.pdf

State-wise Distribution of Universities with Potential for Excellence (UPE)



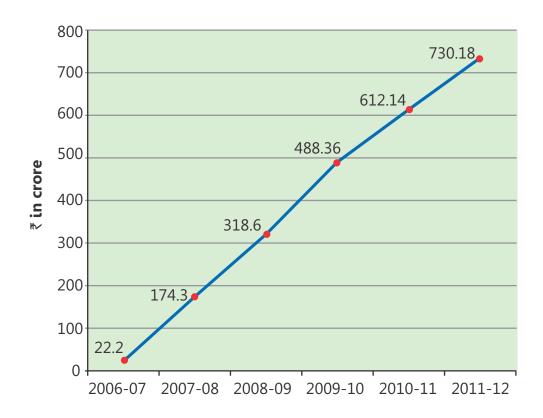
Total UPE: 15

Basic Scientific Research Programme (BSR)

The Basic Scientific Research Programme (BSR) was launched on the recommendation of the Scientific Advisory Committee of the Prime Minister (SAC-PM) pursuant to that the MHRD had established a Task Force for implementation of the SAC PM's recommendation. The objective of the Programme has to give a big boost to scientific research. The Scheme provides for:

- Improvement of infrastructure in Universities
- Support to Colleges (Upgradation of Science laboratories in Colleges)
- Doctoral Fellowship
- Post-Doctoral Fellowships
- Developing Networking Centers, and
- Faculty Recharge

Cumulative Sanctions Under Basic Scientific Research (₹ in Crore)



Centres with Potential for Excellence in Particular Areas (CPEPA)

CPEPAs have been set up to encourage and facilitate the chosen departments at the selected universities so that they can collaborate across the departments by dismantling the discipline barriers. They are free to launch new and innovative academic, research and extension programmes and to strive to achieve global standards of excellence.

There are 23 Centres with Potential for Excellence in Particular Areas spread across 13 States/Union Territories. These centres have been supported with an assistance of more than ₹ 51 crore. The spread of these centres across the states is given in the map on the next page.

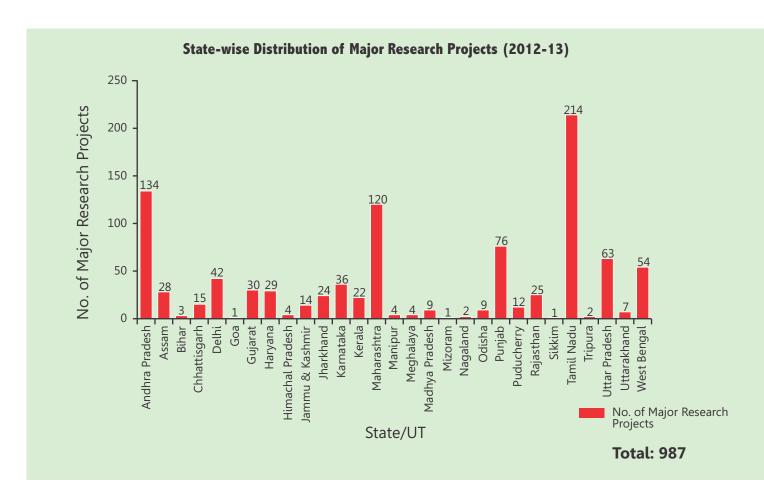
Centres with Potential for Excellence in Particular Areas CPEPA



Total: 23

Major and Minor Research Projects (MRP)

UGC provides financial assistance to teachers teaching in Universities and Colleges to promote excellence in teaching and research. Research project may be undertaken by an individual teacher or a group of teachers. The UGC has supported as many as 987 Major Research Projects and 7501 Minor Research Projects and incurred an expenditure of ₹ 61.86 crore.

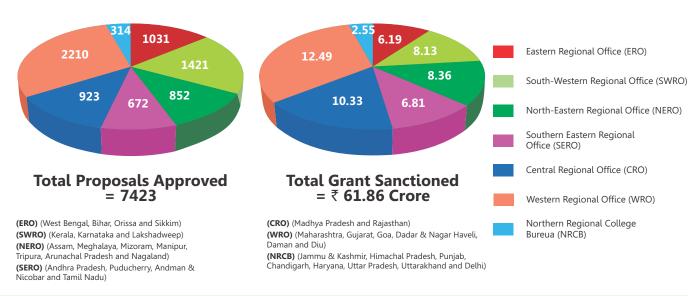


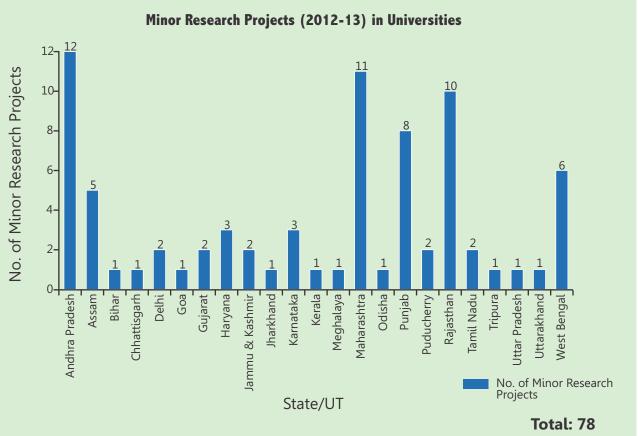
For details, please visit http://www.ugc.ac.in/oldpdf/xiplanpdf/mrpxiplan.pdf

Minor Research Projects in Colleges

No. of Proposals Approved

Grant Sanctioned (in ₹)





The Inter University Centres of UGC

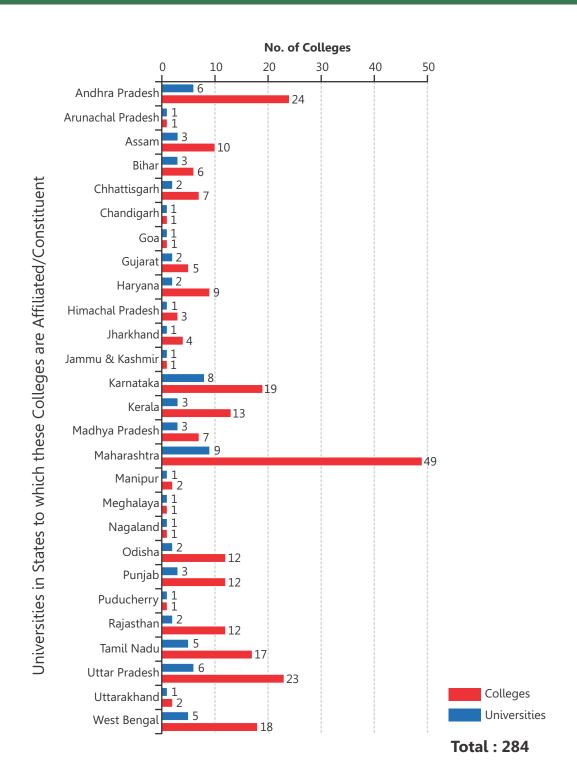
1	Inter University Accelerator Centre (IUAC), New Delhi	Inter University Accelerator Centre (IUAC) (formerly-Nuclear Science Centre) [http://www.iuac.res.in/] provides front ranking accelerator based research facilities to create possibilities for internationally competitive research within the university system. The Centre has been playing a very special role of a research institute within the University system where the scientific and technical staff have dual responsibilities of facilitating research for a large user community as well conducting their own research.
2	Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune	Inter-University Centre for Astronomy and Astro-Physics (IUCAA) [http://www.iucaa.ernet.in/] promotes the nucleation and growth of active groups in astronomy and astrophysics at Indian universities. It aims to be a centre of excellence within the university sector for teaching, research and development in astronomy and astrophysics.
3	UGC DAE Consortium for Scientific Research, Indore	UGC-DAE Consortium for Scientific Research (1989) [http://www.csr.res.in/] Promotes interaction amongst the scientists working in the research centres of the Department of Atomic Energy and the faculty from the universities and other institutions of higher learning and to enable young students to work on programmes of national importance under the joint guidance of the faculty from universities and the scientists of DAE so as to nurture an organic linkage between the university system and research centres of DAE, the University Grants Commission and Atomic Energy of new research facilities
4	Consortium for Educational Communication (CEC), New Delhi	The Consortium for Educational Communication (CEC) (1993) [http://cec.nic.in/Pages/Home.aspx] popularly known as CEC has been established with the goal of addressing the needs of higher education through the use of powerful medium of Television alongwith the appropriate use of emerging Information Communication Technology (ICT). Realizing the potential and power of television to act as means of Educational Knowledge dissemination, UGC started the Countrywide Classroom Programmes in the year 1984. For production of educational programmes, initially Media Centres were set up at 6 Universities. Subsequently CEC was setup in 1993 as a nodal agency to coordinate, guide & facilitate such educational programme production through its Media Centres. Today 22 Media Centres now known as Educational Multimedia Research Centres (EMRCs) are working towards achieving this goal under the umbrella of CEC.

5	Information and	Information and Library Network Centre, (INFLIBNET) [www.inflibnet.ac.in] is					
	Library Network	involved in creating infrastructure for sharing of library and information resources					
	(INFLIBNET)	and services among academic and research Institutions. It works collaboratively with					
	Centre,	Indian university libraries to shape the future of the academic libraries in the evolving					
	Gandhinagar	information environment					
		The INFLIBNET serves towards modernization of Libraries, serves as Information Centre for transfer and access of information, supporting scholarships and learning and academic pursuits through a National Network of Libraries in around 264 Universities, Colleges and R&D Institutions across the country.					
6	National	National Assessment and Accreditation Council (NAAC) [http://www.naac.gov.in/]					
	Assessment and	was established by the UGC in September 1994 at Bangalore for evaluating the					
	Accreditation	performance of the Universities and Colleges in the country. NAAC's mandate					
	Council (NAAC)	includes the task of performance evaluation, assessment and accreditation of					
	Bangalore	universities and colleges in the country. The philosophy of NAAC is based on					
		objective and continuous improvement rather than being punitive or judgmental, so					
		that all institutions of higher learning are empowered to maximize their resources,					
		opportunities and capabilities. Assessment is a performance evaluation of an					
		institution and /or its units and is accomplished through a process based on self-					
		study and peer review using defined criteria. Accreditation refers to the certification					
		given by NAAC which is valid for a period of five years. At present the Assessment and					
		Accreditation by NAAC is done on a mandatory basis.					
7	IUC for Teacher	Proposed to set up at the national level, will network with the schools of Education as					
	Education	well as create benchmarks for influencing the quality of research in the universities					
		and raise the profile of the existing institutions of higher education.					

Colleges with Potential for Excellence (CPE)

The UGC has launched this scheme to foster excellence in teaching and research in colleges. The scheme provides financial support to help improve the colleges, their academic and physical infrastructure, introduce innovative teaching methodologies and implement modern learning and evaluation methods. The UGC has so far identified 284 Colleges with Potential for Excellence and supported them with financial assistance of ₹ 220.35 crore.

State-wise Distribution of Colleges with Potential for Excellence (2012-13)



Singh-Obama 21st Century **Knowledge Initiative**

This is a joint initiative of the Government of India and the United States of America to foster partnerships between educational institutions of both the countries in the field of higher education and research. The main aim of the scheme is to forge linkages amongst institutions of higher learning from both the sides so that they can collectively address the grand challenges in areas like Energy Studies, Sustainable Development, Climate Change, Environmental Studies, Education and Educational Reform & Community Development and Innovation, Urban and Rural Development etc. UGC has made an allocation of ₹ 25 crore to support this initiative.

Indian Institutions	U.S. Partner
Indian Institute of Technology, Kanpur	Virginia Tech., Blacksburg Virginia
Indian Institute of Technology, Delhi	Drexel University, Philadelphia
Banaras Hindu University, Varanasi	University of Pittsburgh
Mahatma Gandhi University, Kottayam	Brown University
	Duke University
	Plymouth State University

For details, please visit http://www.ugc.ac.in/pdfnews/3413227_English.pdf

Grand Challenges to be Addressed under Singh-Obama 21st Century Knowledge Initiative



UK-India Education and Research Initiative (UKIERI)

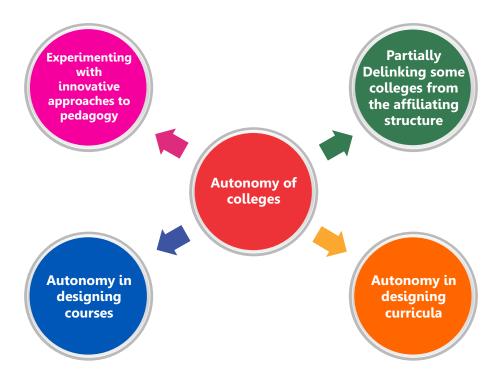
The UK India Education and Research Initiative (UKIERI) was initiated in 2006 with the aim of fostering educational linkages between India and the UK. In the last five years, UKIERI has played a pivotal role in establishing educational relationships between the two countries. In recognition of the substantial achievements and building on the success of this initiative, the programme has been recently extended up to 2016. The UGC and UKIERI have so far supported 20 joint projects. The UGC has made an allocation of ₹ 17.5 crore under this initiative.

Joint Projects Supported by UGC-UKIERI

S. NO.	DOMAIN KNOWLEDGE	S. NO.	DOMAIN KNOWLEDGE
1.	Unravelling novel circuitry regulating cell wall integrity, mitochondria and MDR in Candida albicans.	11.	Development of Optical Fibre based devices for Sensing Applications (DOFISA).
2.	Scenography in a digital age: A comparative study of the impact of new media on contemporary Indian and British performance practice.		Development of conjugate fusion protein vaccine against Diarrhoegenic E.coli.
3.	Tailoring and optimization of structural and electrical properties of semi-conducting oxide based nano structured materials suitable for novel gas sensing applications.	13.	Municipal Solid Waste (MSW) to Energy: Decision Support System (DSS) for Supply Chain Design and Planning.
4.	New Developments in Screen Printed Sensors: From the laboratory to the field.	14.	Optimising phosphate recovery from community bioenergy systems: Low cost sustainable fertilizer production for rural communities.
5.	Envisioning the Indian City: Spaces of Encounter.	15.	Design and synthesis of potent dual inhibitors of Cdk4 and tubulin as anticancer agents.
6.	Innovations in International Outreach Social and Legal Methodologies in Research and Education.	16.	Climate Change and Groundwater management: An Indian Law and Society Comparative Study.
7.	Evolution of Human hair form.	17.	Development of Ln+3-dopedfluoride glasses and nano-glass ceramics for compact Visible and White laser applications.
8.	Intergroup Contact and Collective Action in Educational Settings in India.	18.	Vellore-Aberdeen Nutrition Exchange (VANE) Project.
9.	Application of ketodithoesters and S,S-/N,S-/N,N-acetals in organic synthesis: One-pot multi component reactions.	19.	Hydrothermal Growth of Multi componemt Barium Titanate based Ferroelectric Oxides for Multilayer Capacitors.
10.	Evaluation of Tribological Behaviour and Wear corrosion of CNTs reinforced Aluminium Metal Matrix composites.	20.	Sustainable resourcing of platinum-group elements (PGE): Studies to understand and locate PGE in chromitites and breccias in India.

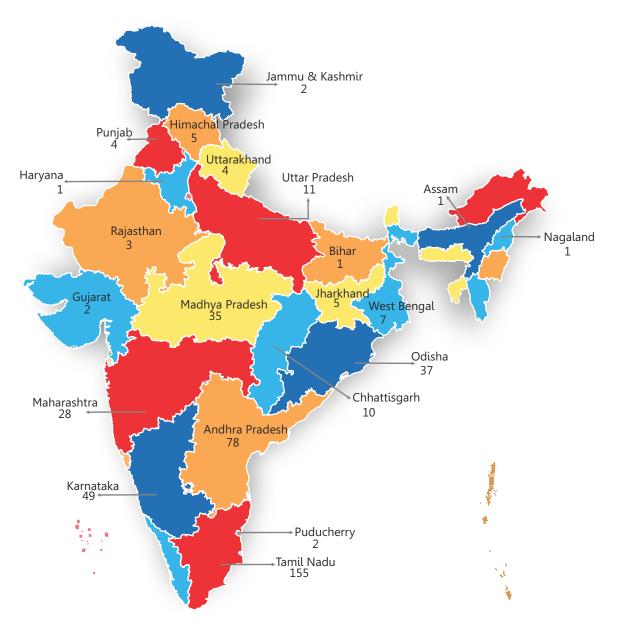
Autonomous Colleges

This scheme was launched by the UGC with a vision to advance the quality of under-graduate education by partially delinking some colleges from the affiliating structure of the universities and promoting the concept of autonomy in designing curricula, prescribing syllabi, evolving pedagogy and appropriate assessment techniques. The UGC has so far identified 441 autonomous colleges spanning over 21 states, 85 Universities and supported them with an expenditure of ₹ 140 crore.



For details, please visit http://www.ugc.ac.in/pdfnews/9986207_revisedautonomouscollegejan13.pdf

State-wise Distribution of Autonomous Colleges as in May, 2013



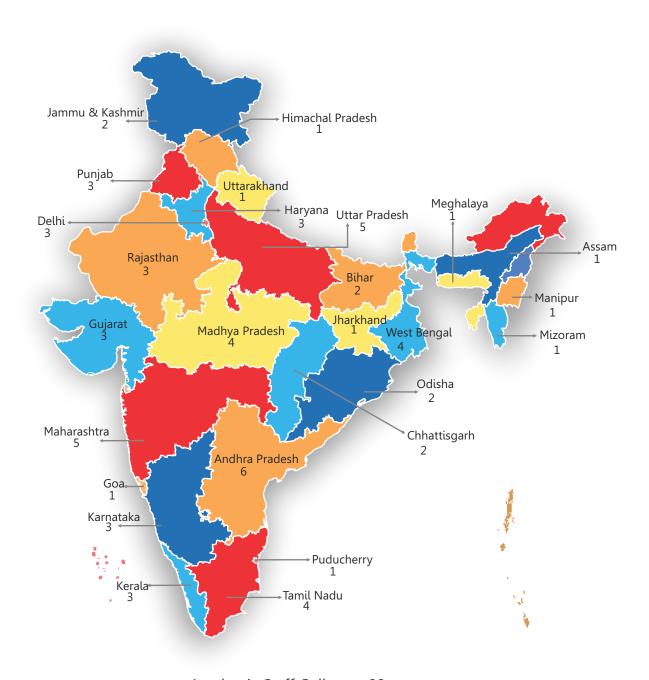
States: 21 Universities: 85

Autonomous Colleges: 441

Academic Staff Colleges (ASC)

UGC has set up 66 Academic Staff Colleges (ASCs) in different Universities/ Institutions in the country. The Academic Staff Colleges so established are conducting specially designed orientation and refresher programmes for the teachers. The UGC has been providing full financial assistance to the host Universities/ Institutions to run the affairs of the Academic Staff Colleges. The UGC incurs an expenditure of about ₹ 50 crore per annum on its Academic Staff Colleges.

State-wise Distribution of Academic Staff Colleges as on 31st March, 2013



Academic Staff Colleges: 66

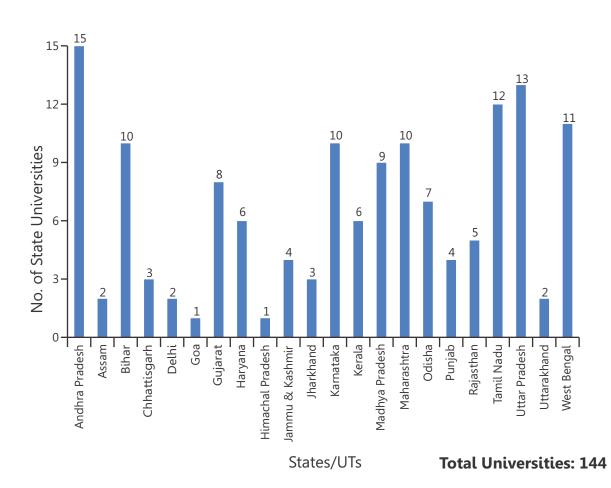
Faculty Development Programmes: Enhancing Faculty Resources of Universities

In order to support its efforts to enhance the quality and excellence in higher education, the UGC has launched a specific programme to enhance the faculty resources of the Universities. This scheme of the UGC has got two components namely Faculty Recharge Programme, and Enhancing Faculty Resources in Universities.

For details, please visit http://www.ugc.ac.in/oldpdf/xiplanpdf/universitesdevelopmentassitenceoctober.pdf

State-wise Distribution of Faculty Development Programmes as on 31st March, 2013

≥10 Universities	Andhra Pradesh, Bihar, Karnataka, Maharashtra, Tamil Nadu, Uttar Pradesh, and West Bengal	
5-10 Universities	Gujarat, Haryana, Kerla, Madhya Pradesh, Odisha, and Rajasthan	
<5 Universities	Assam, Chhattisgarh, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Punjab, and Uttarakhand	



Faculty Recharge Programme

Taking cognizance of the decline in research output the Empowered Committee of the UGC has initiated a remedial Programme of faculty recruitment called "Faculty Recharge Programme". The Programme envisages recruitment of highly motivated faculty with flair for research in interdisciplinary/frontier areas of science through a global advertisement. The UGC is contemplating recruitment of 1000 faculty over a period of time and place them in different Universities depending upon the requirements of the Universities and the specialization of the prospective faculty. As many as 54 such appointment have already been made under the scheme. These professionals are going to take up their respective assignment across 20 Universities.

Encore

Enhancing Faculty Resources in universities is yet another initiative of the UGC. The programme aims at enlarging and deepening the learning process in the universities by enlisting the help and cooperation of professionals and experts from outside the university and college system. Their help and cooperation is enlisted in institutional work and research as adjunct faculty and Scholar-in-Residence.

Services of professionals and specialists from Public Sector Undertakings and business organizations especially those in the R & D are solicited under the programme.

For details, please visit http://www.ugc.ac.in/oldpdf/xiplanpdf/encore5nov09.pdf

Coaching Scheme for Scheduled Castes, Scheduled Tribes, OBC, Minorities

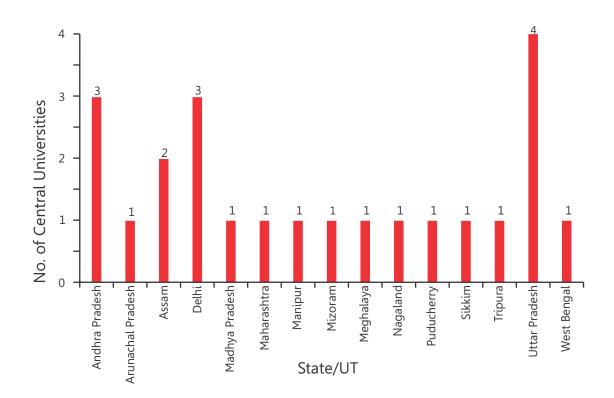
UGC has been providing additional assistance to the universities and colleges which are offering coaching programmes to the students belonging to vulnerable sections of the society. Specific coaching programmes are organized at three levels namely; Remedial Coaching at UG and PG level, Coaching for Entry into Services, and Coaching for NET.

The scheme has benefitted as many as 18, 35, 560 students from over 176 Universities at a cost of ₹ 319.64 crore.



For details, please visit http://www.uqc.ac.in/oldpdf/xiplanpdf/universitesdevelopmentassitenceoctober.pdf

Coaching Scheme for Scheduled Castes, Scheduled Tribes, OBC, Minorities During XI Plan the Total Number of Beneficiaries in 23 Central Universities was 575



Colleges with Relatively Higher Proportion of SC/ST & Minorities

This scheme aims at providing access to students belonging to SC/ST/Minority/OBC/PWD. The UGC has supported about 3,028 colleges with an expenditure of ₹ 69.41 crore.

Significant UGC Fellowships/Awards

Research Awards for Teachers

The programme provides opportunities to permanent teachers of universities/institutions to pursue research in their area(s) of specialisation for a period of two years, extendable for another year. There are 100 slots available under the scheme every alternate year.

Dr. D.S. Kothari Fellowships in Science, **Engineering & Technology**

The fellowship scheme is aimed at redeeming the expected shortfall in trained faculty required for institutions of higher education in the country and fostering a post-doctoral research culture.

Raman Fellowships for Post Doctoral Research for Indian Scholars in USA

The focus of this Fellowship is to provide opportunities to permanent Indian teachers to undertake international collaborative research, training in advanced techniques and technology in emerging fields thereby furthering their research capacity and ability to contribute to higher education with a global perspective. Under this scheme 126 Fellows have been selected for the year 2013-14. These Fellows are going to work in different US Universities for a period ranging from a couple of months to a year.

For details, please visit http://www.ugc.ac.in/oldpdf/xiplanpdf/researchawardamendments24may11.pdf http://www.ugc.ac.in/page/Basic-Scientific-Research.aspx http://www.ugc.ac.in/oldpdf/xiplanpdf/dskothari_fship.pdf

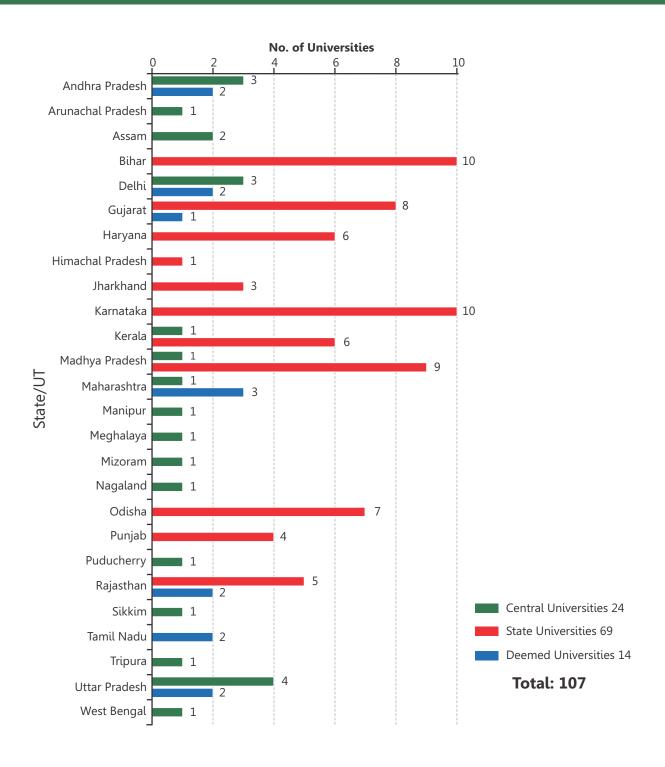
Non-NET Fellowships

UGC has introduced the scheme of Non-NET M.Phil/Ph.D Fellowships. These Fellowships are now available in all Central Universities and also those State Universities which are conferred the status of universities with Potential for Excellence. The scheme has benefitted more than 55,000 students so far.

Fellows of Different Academia

The UGC has started a scheme wherein it provides a special honorarium to teachers who are Fellows of at least two of the four identified science academies-National Academy of Science, Allahabad; Indian Science Academy, Bangalore; Indian National Science Academy, New Delhi and Indian National Academy of Engineering, New Delhi. This is an incentive given to the scientists whereby their salary is topped up by $\ref{eq:salary}$ 15,000 per month.

Fellows of Different Academia State-wise Distribution of Universities Assisted During the XI Plan

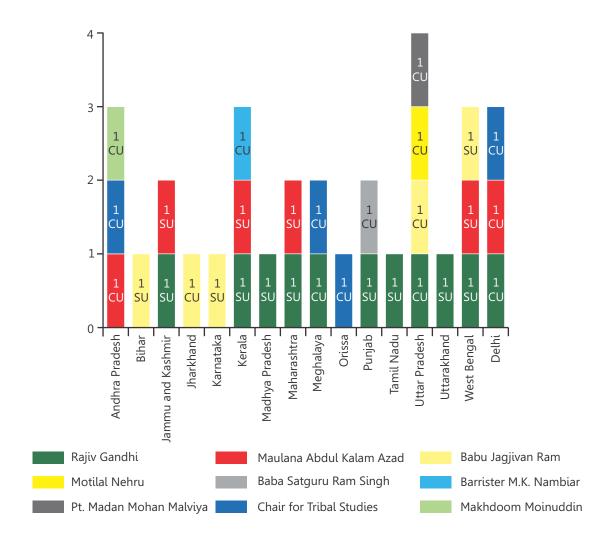


Chairs

In order to giving a fillip to research & development, the UGC has made a provision for the establishment of Chairs in different universities. These chairs are named after illustrious persons who have made significant contribution in their chosen fields. Currently, the UGC is supporting about 9 chairs mentioned as under:

- 1. Rajiv Gandhi Chair
- 2. Maulana Abdul Kalam Azad Chair
- 3. Babu Jagjivan Ram Chair
- 4. Motilal Nehru Chair
- 5. Baba Satguru Ram Singh Chair
- Barrister M.K. Nambiar Chair 6.
- Pt. Madan Mohan Malviya Chair 7.
- Tribal Studies Chair 8.
- Makhdoom Moinuddin Chair 9.

State-wise list of Chairs in Central & State Universities



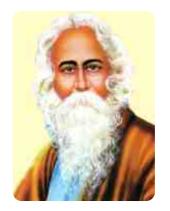
Establishing Chairs in the Name of Nobel Laureates: Programme in the Offing

University Grants Commission (UGC) is working on a programme for establishing Chairs in the name of those Indians and India-born foreigners who have made the country proud.

The Chairs will be associated with the names of

- Rabindranath Tagore (1)
- (2) C.V. Raman
- Hargobind Khorana (3)
- Mother Teresa (4)
- Subramanyam Chandrasekhar (5)
- (6) Amartya Sen
- Venkatraman Ramakrishnan (7)

Nobel Laureates



Rabindranath Tagore



C.V. Raman



Hargobind Khorana



Mother Teresa



Subramanyan Chandrasekhar



Amartya Sen



Venkatraman Ramakhishnan

UGC Fellowships and Scholarships

SI. No	Name of the Scheme	Number of slots per year	Year of Inception	Tenure of Fellowship/ Scholarship	
	Research Fellowships (For M.Phil/Ph.D.)				
1.	Rajiv Gandhi National Fellowships for SC/ST (implemented by UGC on behalf of the Ministry of Social Justice & Empowerment and the Ministry of Tribal Affairs)	2000 for SC and 667 for ST	2005-06 (Selection of fellow-ship commenced from 2006-07)	5 years	
2.	Maulana Azad National Fellowships to Minorities Students (new scheme started from 2009-10 & implemented by UGC on behalf of the Ministry of Minority Affairs)	756	2009-10	5 years	
3.	Junior Research Fellowships (JRF) to NET qualified candidates	3200 per test	1957-58 1984-NET	5 years	
4.	Junior Research Fellowships (JRF) in Engineering & Technology	50	1994	5 years	
5.	Junior Research Fellowships (JRF) & Research Associateships (RA) to Foreign Nationals	20 JRF + 7 RA	1957-58	5 years FN- 4 years	
6.	Research Fellowships for Ph.D. in Science for Meritorious Students of State Universities/Colleges	5244	2007-08	5 years	
7.	Research Fellowships in Humanities & Social Sciences (New scheme to be started from 2010-11)	165	2010	Initially for 2 years	
	Post Doctoral Fellowships				
8.	Dr. D.S. Kothari Post Doctoral Fellowships in Science	500	2008-09	2 years	
9.	Radhakrishnan Post Doctoral Fellowships in Humanities & Social Sciences (w.e.f. 2009-10)	500	2009-10		
10.	Post Doctoral Fellowships for SC/ST	100	2006-07	5 years	
11.	Post Doctoral Fellowships for women				
	Postgraduate Scholarships				
12.	Raman Fellowships for Post Doctoral Research for Indian Scholars in United States	300	2012	6 months-12 months	
13.	Scholarships to the students of Central Universities (scheme launched in February, 2007)	12524	Feb.07	Duration of the course	
14.	Post Graduate Scholarships for SC/ST in professional courses	1000	2006-07	2 years	
15.	Indira Gandhi PG Scholarships for Single Girl Child	No limit*	2005-06	2 years	
16.	Post Graduate Merit Scholarships for University Rank Holders	2375	2005-06	2 years	
17.	Post Graduate Scholarships to GATE qualified students	1400	As per directive of M/HRD	2 years	

^{*} Indira Gandhi PG Scholarships for Single Girl Child 8040 Awarded during last 5 yeas

Notes:	
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