



**Ministry of Education**  
Government of India



# All India Council for Technical Education

**REALIZING SUSTAINABLE DEVELOPMENT GOALS (SDGs)  
THROUGH HIGHER EDUCATION INSTITUTES  
FOR ENSURING EQUALITY & SUSTAINABLE SOCIETY**

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AICTE (e-Governance)**



## Growth of Technical Education in India

Year	Degree Institutions	Admission Capacity	Diploma Institutions	Admission Capacity
1947-48	38	2940	53	3670
1950-51	49	4120	84	5900
1955-56	65	5890	114	10480
1960-61	100	13860	196	25570
1965-66	117	19140	263	37390
1969-70	136	25000	312	50000
1985-86	279	67750	739	115000



## Growth of Technical Education in India

Year	Degree Institutions	Admission Capacity	Diploma Institutions	Admission Capacity
1990	337	66600	879	122000
1997	547	130949	1102	184648
2007	1503	583333	1288	300501
2015-16	4470	1735500	4353	1302028
2016-17	4415	1658507	4469	1294027
2017-18	4397	1581372	4586	1262902
2018-19	4436	1516958	4814	1202733
2019-20	4745	1473750	5504	1164958
2020-21	4068	1386726	4456	1067951



### Intake, Enrolment, Passed and Placement for Last 5 Years



Year	Institute	Intake	Enrolments	Passed	Placement
2016-2017	10366	3702702	1954985	1713849	722868
2017-2018	10398	3551957	1895487	1571507	715918
2018-2019	10426	3392845	1856776	1546126	794884
2019-2020	11001	3287064	1852598	1172683	777169
2020-2021	9639	3085842	1644588	-	638173
2021-2022	8987	2970086	-	-	-



## Intake, Enrolment, Passed and Placement

Year	Institute	Intake	Enrolment	Passed Out (%)	Placement (%)
2016-2017	10366	3702702	1954985	87.6%	42.1%
2017-2018	10398	3551957	1895487	83%	55.4%
2018-2019	10426	3392845	1856776	83.2%	51.4%
2019-2020	11001	3287064	1852598	92.4%	66.2%
2020-2021	9639	3085842	1644588	-	638173

## CHALLENGES...

- Shortage of Quality faculty
- Vacant seats
- Private Universities (No check on quality and intake)
- Quality and Accreditation : Employability
- Institute Industry Connect
- Entry of Foreign Universities

## Transparency Through online system, Reduction of Compliance Burden and Ease of doing Business

- ▶ AICTE has re-engineered the whole system of approval process by introducing single window system of online solution to grant of approval to technical institutes. AICTE approval process is based on principle of “Light but tight” regulations.
- ▶ As part of bringing quality in technical education, accredited institutions/ institutions with graded autonomy institutions will be given approval for multiple years (extended EoA).

## Transparency Through online system, Reduction of Compliance Burden and Ease of doing Business

- ▶ Technical education Regulatory charges/ processing fees are reduced and totally processed in digital mode only. There are no TER charges for Government and Government aided institutes. The self-financing institutes having more than 50% courses accredited are getting Extended EoA without TER charges.
- ▶ Reduced burden on stakeholder through minimizing number of documents for grant of approval.
- ▶ The scholarship is being given completely online flawlessly with online attendance capturing and in case attendance is not given by institute then the scholarship is given treating as deemed presence



## Transparency Through online system, Reduction of Compliance Burden and Ease of doing Business

- ▶ Verification of documents and infrastructure facilities for Grant of approval for New Institutions is simplified through online scrutiny and through virtual visit. There is no physical visit of experts to institutes and no physical interaction between
- ▶ Technology enabled (AI based) helpdesk system (Chatbot) to reduce human intervention
- ▶ Committees Formation for Scrutiny, Virtual Inspection is Automated
- ▶ Special provision for internal dashboard and report generation facility Online Applications for AQIS Schemes such as RPS, MODROB. Evaluation AQIS schemes



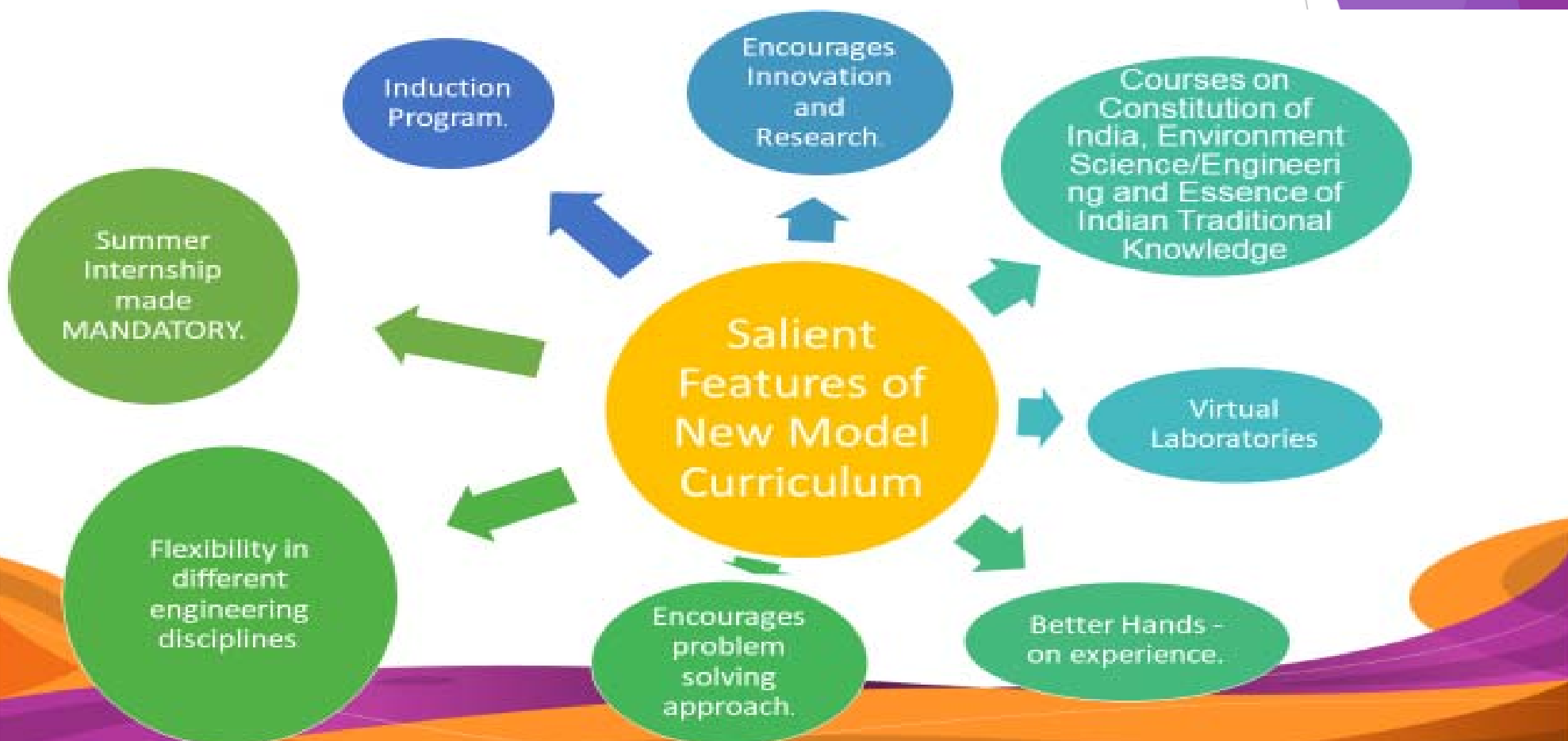
# Quality Initiatives

## AICTE Quality Initiatives undertaken:

- Revision of Curriculum
- Teacher Training (Certification and FDP)
- Mandatory Induction Program for Students
- Internship Policy
- Exam Reforms
- Mandatory Accreditation
- Perspective Plan
- Industry Readiness- Mandatory Cell
- Promoting Innovation/Start-ups



# 1. Revision of Curriculum





## 2. Mandatory Teachers' Training

### 1. Training Modules During Induction of Teachers

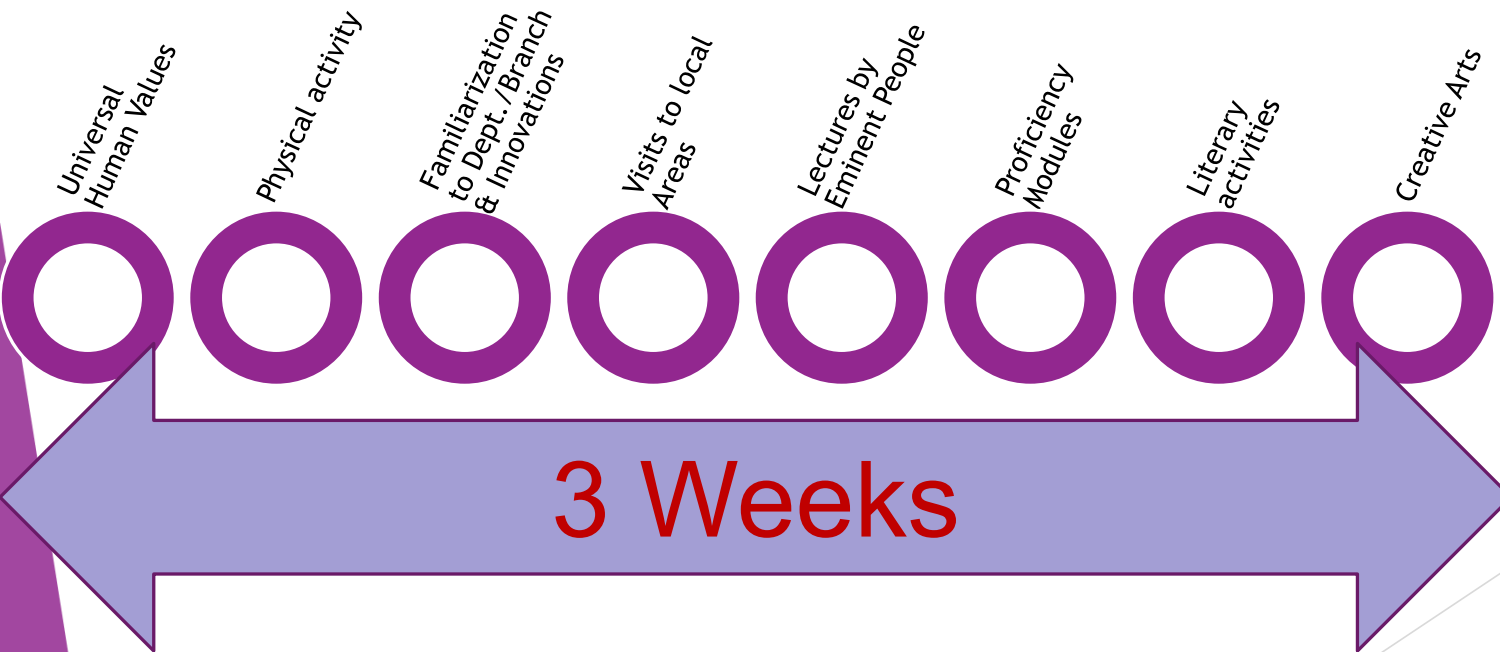
- General Orientation towards Technical Education
- Inculcation of Values and Attitudes
- Communication Skills
- Instructional Planning & Classroom Delivery
- Technology Enabled Learning and Life-long Self-learning
- Effective Modes of Student Evaluation
- Creative Problem Solving, Innovation and Meaningful R & D
- Institutional Management & Administrative Procedures

### 2. Summer Internship

### 3. Mentored Teaching



# 3. Student Induction Program



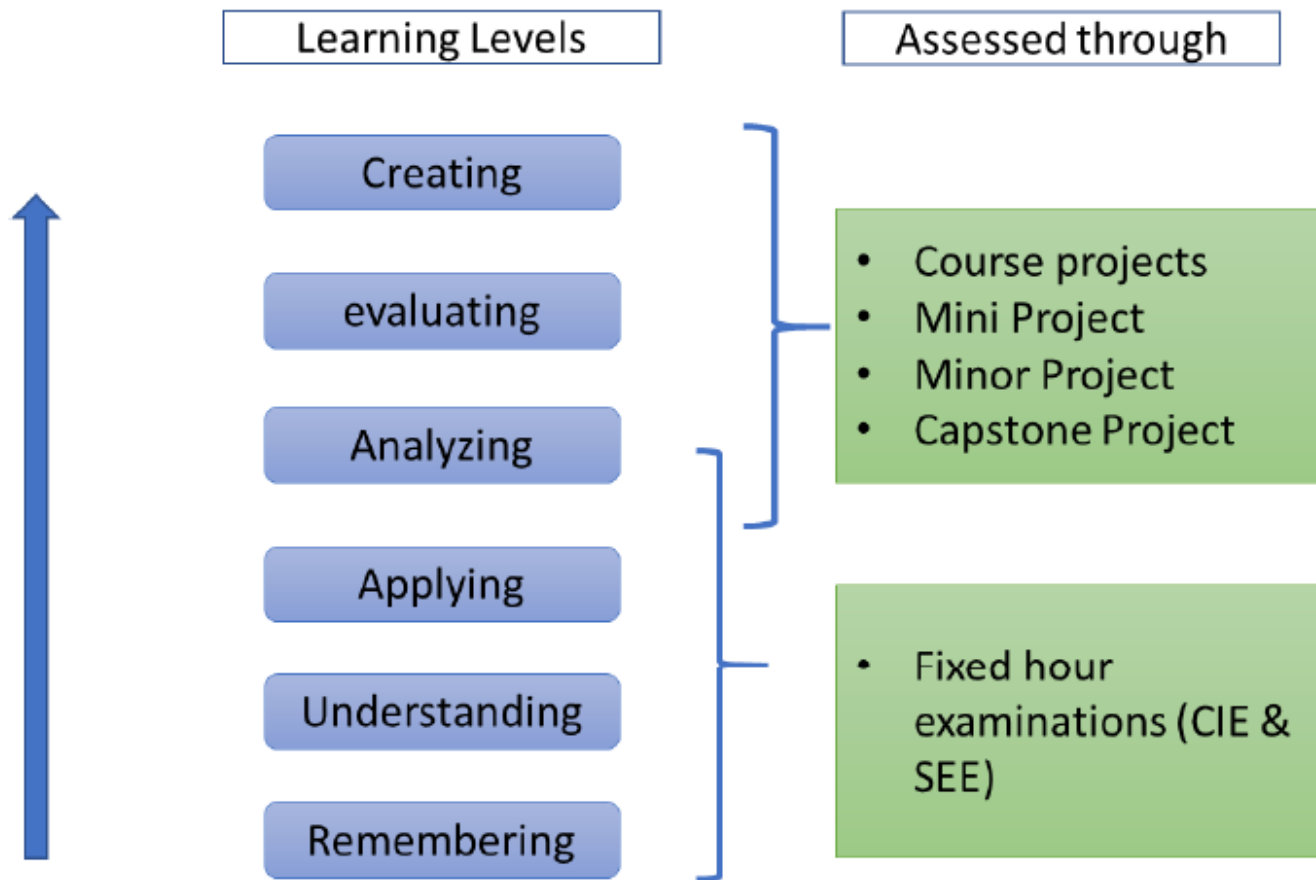


## 4. Mandatory Internship

- Six Months Industrial Internship (14-18 Credits)
- Mandatory dedicated Training and Placement cell.
- Supported by Departmental Coordinator & Faculty Mentors
- Each Faculty Mentors to supervise 20 students
- Budget – Each institute may allocate 1 % of their total budget for Training and Placement cell.
- AICTE Internship Portal : 11.89 lakh internships (69 lakhs).
- MoUs with MOHUA, NHAI, Social Welfare Ministry, Water, Railways, IBM, Microsoft, Google, CISCO, Wiley, Aerospace, Oil Industry, NASSCOM, NCDC, etc.

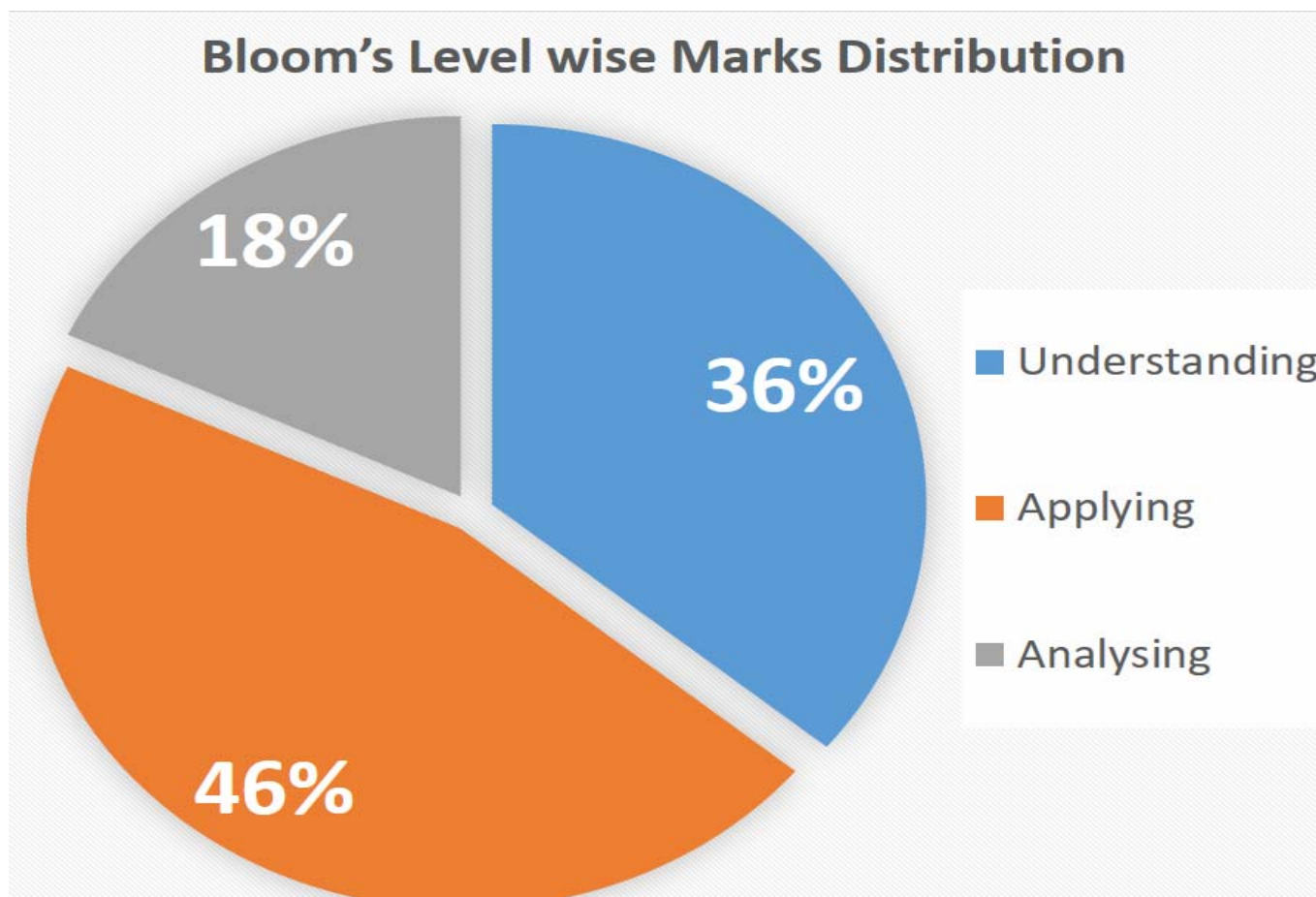


# Examination Reforms : Bloom's Taxonomy





## 5. Exam Reforms (contd.)

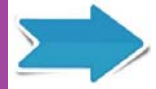






## 6. Mandatory Accreditation

- Accreditation has been made mandatory for increase in intake and for starting new program.
- Margdarshan and Margdarshak Schemes for mentoring and supporting institutes to improve quality.
- 334 Margdarshaks and 46 Margdarshan Institutes supporting 913 institutes.
- 142 Institutes got accreditation (73 got NBA, 69 through SAR).





## 7. Perspective Plan

Dr. Mohan Reddy Committee : Courses on following emerging technologies started:



AI



Data Science



IoT



Cyber Security



Robotics



Quantum  
Computing



AR/VR



Block chain



3D Printing

- ✓ NITTTR Chandigarh Prepared curriculum in the 9 areas of Technologies
- ✓ Greater focus on multi-disciplinary courses
- ✓ So far, 1.9 Lakh faculty members have been trained through ATAL Academy in these emerging areas through 1702 programmes .



## 8. Industry Readiness : Mandatory Cell

- Mandatory Industry Readiness cell
- Minimum 5 MOUs with the industry
- Involvement of Industry
- Curriculum Revision
- Setting up of state-of-the art labs
- Skill development, soft and hard skills
- Co teaching
- Industry relevant projects
- Scholarships etc



## 9. Promoting Innovation

- Journey from Hackathons to Ministry's Innovation Cell
- To encourage ideation, creativity amongst students
- Tweaking education system to foster innovation
- To have services-led, knowledge-based, innovation-driven economy
- To facilitate commercialization of frugal innovations
- To promote 'Think in India' philosophy
- Invest and Reward IP creation
- Innovation Councils, Innovation Ambassador Programs
- Connecting with School System: CBSE



# Quality in Higher Education

## ➤ Committed Faculty:

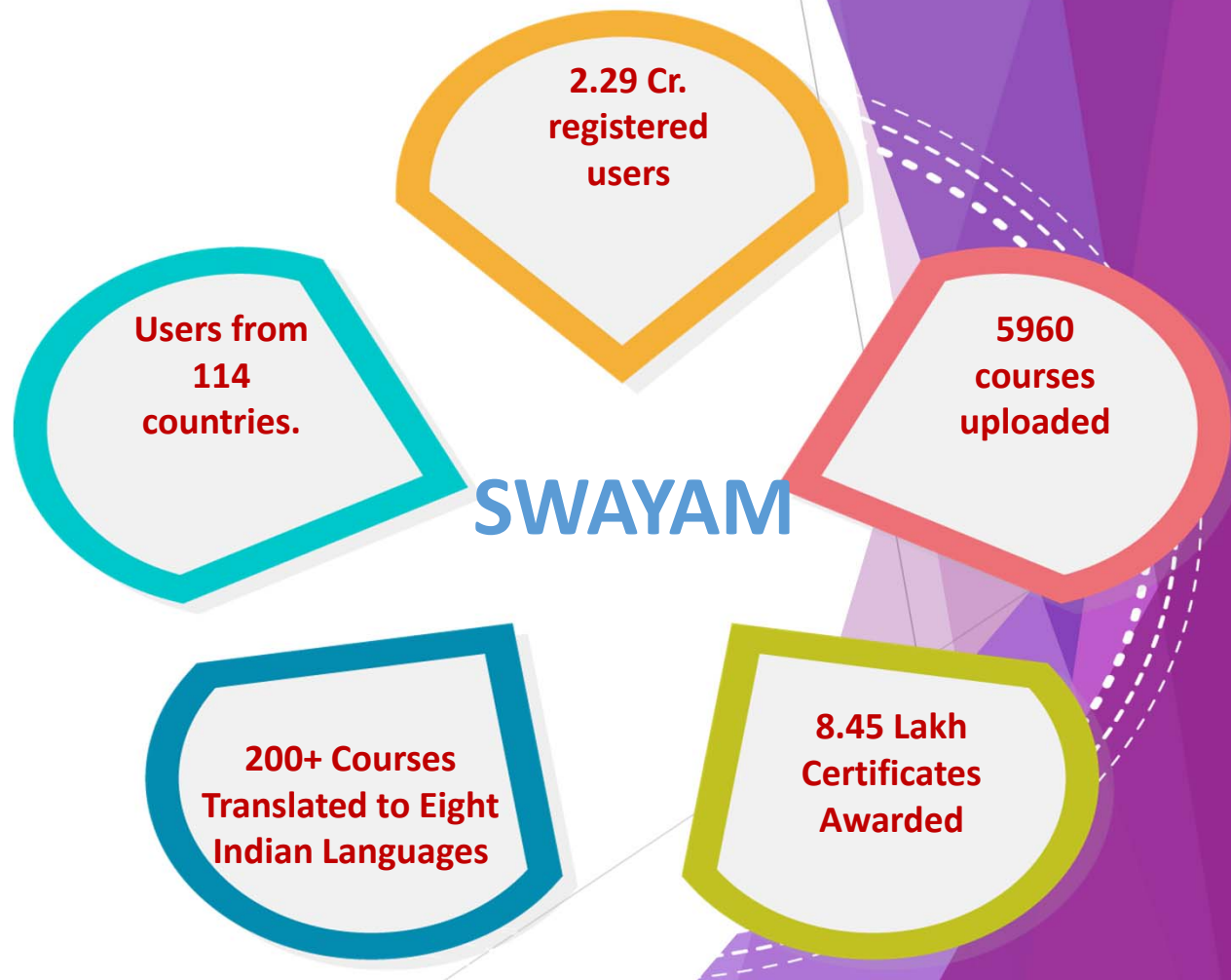
- AICTE travel grant scheme, for presenting research papers
- Research Promotion Scheme
- **AICTE Doctoral Fellowship Scheme**
- Subscription to SCOPUS and Web of Science
- **AICTE Visvesvaraya Best Teachers' Award**
- 360 degree feedback for fast-track promotions
- **AICTE UKIERI** Leadership Development Program
- Training programs through ATAL Academy and Technical Universities



# Promoting Online Education



Subject	Number of Courses Available : 5960
First Year Courses	
Physics	10
Chemistry	20
Mathematics	10





# Internationalization

- **Twining & Collaboration:**
- Opportunity for global exposure through **MOUs like MITACS in Canada.**
- **International exposure** to 10 meritorious women innovators/startups every year to Carlton University, Canada
- A semester long visit abroad during PhD under QIP
- Financial help to Indian students in competitions abroad



## Other Initiatives...in Progress

- Chhatra Vishwakarma Award: [Connect to Society](#)
- Financial support towards opportunities for higher education in the form of [PG scholarship and doctoral fellowship for PhD](#).
- National Initiative for Technical Teacher's Training (NITTT).- approx. [23,000 teachers underwent 08 online modules](#).
- Faculty Development Programmes (FDPs) in [Universal Human Values \(UHV\)](#)- [62208 faculty trained \(256 workshops\)](#)
- Clean and Smart Campus Award
- AICTE-CII Industry Linkages Award
- AICTE's YUVAK scheme to conduct an educational tour to Atal Tunnel & other similar marvels (Rs 1.75 Crores grant disbursed to 90 Institutions)





## Recent Initiatives

- AICTE-IDEA [Idea Development Evaluation Application] Lab scheme: Rs.1 crore each (50 lakhs from Industry + matching grant from AICTE) : 100 institutes planned, 50 selected (Trained)
- AICTE-Scheme for Promoting Interests, Creativity and Ethics among Students (SPICES): Rs. 1 lakh per institute for 200 institutes
- Promoting women empowerment through Lilawati award.
- Translation of SWAYAM courses in English and in 08 Indian languages – extending to 12 languages
- Graded autonomy to stand alone institutions
- Spreading Menstrual Health and Hygiene



# Indian Knowledge System in line with NEP

**To promote research on all aspects of “Indian Knowledge Systems”, preserve and disseminate IKS for societal applications.**

- **Create a database of individuals and organizations who have contributed by way of Research, Teaching, Publication and Preservation of ancient and contemporary rich Indian knowledge**
- **Promote and enable further research to address the societal challenges faced today in several areas**
- **To promote research in IKS for providing proof of concepts and new knowledge generation**
- **To establish IKS cells in all universities and other institutions under MoE. [22 webinars](#)**



THANK YOU