Reference Material

REFERENCES

UVCE Information : CET – Student Ranking

The rank of candidates in K-CET who were admitted to college under General Merit for the academic year 2017-2018. This generally gives an idea about where the college stands from the students' perspective of choice of the college.

Branch	Starting Rank	Ending Rank
CIVIL	14088	18452
COMPUTER	1289	3483
ELECTRONICS	2081	5159
ELECTRICAL	5681	10536
INFORMATION	2407	6711
MECHANICAL	4127	11069

Over the years, the students with better CET Ranks opting UVCE has reduced. A small comparison here:

Branch	Median CET Rank – 2013	Median CET Rank - 2018
ELECTRONICS	1324	3647
COMPUTER SCIENCE	1117	1932
INFORMATION SCIENCE	2832	3560
MECHANICAL	1362	11313
ELECTRICAL	2947	7288
CIVIL	5139	13744

Placement Statistics

Based on the number of companies visiting the campus for recruitment and no of offers made to the students, we can gauge the quality of students from companies' perspective. There are other points to be taken into consideration as well – Reputation of the companies, Pay package offered, HR Feedback etc.

YEAR	NO OF COMPANIES	NO OF OFFERS
2011-12	80	944
2012-13	80	758
2013-14	84	556
2014-15	109	920
2015-16	152	1067
2016-17	144	606
upto(31/10/2017)		

On an average, around 80-85% of the eligible students get placed every year. In the past five years, average pay package for the student can be considered as around 3.2 LPA. Companies like Microsoft, Goldman Sachs, Thought Works, Royal Enfield, Volvo, BOSCH, Brigade Group, Oracle, Adobe, Amazon, Honda, Nokia Siemens, ABB, IBM, GE, Samsung, L&T, Infosys, Cognizant, Accenture have visited the campus regularly over the years and recruited the students based on their talent and skills.

Present UVCE Ranking

Current State Ranking of UVCE including Private universities, NIT, IISc

Online Portal	2017 Ranking
EduVidya	NA
Carriers 360	53rd
Shiksha	13th
Sarvgyan	12th
College Duniya	10th
Inspire Ignite	9th
The Week Magazine	9th (#75th AIR)

Rankings were provided considering parameters such as: Infrastructure; Academic excellence; Placements; Students preference; National Importance; College accreditation and affiliation.

Some Numbers/Indices
- Teacher Student ratio - 113 : 4332 in 2014-15
- SC Student % - 824/ 4332 in 2014-15
- ST Student % - 131/4332 in 2014-15
- Gender ratio: 2950 Boys: 1382 Girls
- Computer Coverage: 400 working computers for 4332 students in 2014-15

Fees Structure

BE & Barch Annual Fees Structure						
	I Year	II Year (Lateral)	II Year	III Year	IV Year	V Year (B.Arch)
Registration Fee	2000	2000	0	0	0	0
Admission Fee	1000	1000	1000	1000	1000	1000
Tuition Fee	16000	15000	15000	15000	15000	15000
User Fee(Computer & Internet)	1000	1000	1000	1000	1000	1000
Library Fee	1000	1000	1000	1000	1000	1000
Sport Fee	500	500	500	500	500	500
Development Fee	5000	5000	5000	5000	5000	5000
Medica Fee	100	100	100	100	100	100
Student Activities Fee	100	100	100	100	100	100
Students Identity Card	100	100	100	100	100	100
Cultural Activity Fee	500	500	500	500	500	500
NFTW	20	20	20	20	20	20
KSTBF	25	25	25	25	25	25
KSSWF	25	25	25	25	25	25
	27370	26370	24370	24370	24370	24370

There is concession for various categories of students:
- Super Numerary Quota students– Rs.9370/-
- Cat-1, 2A, 3A, 3B students – Rs. 7870/-
- Minorities Students – Rs.6523/-
- SC/ST Students – Rs.770/-

A separate fee of amount Rs.1958/- has to be paid for every Semester (hence, Rs.3916/- annually) by the General students. The category students have concession for that as well.

College Intake

Four year full time UG(BE)

- Civil Engineering(100)
- Mechanical Engineering(100)
- Computer Science Engineering(70)
- Information Science Engineering(60)
- Electrical & Electronics Engineering(80)
- Electronics & Communication Engineering(60)

Five year full time UG course

- B.Arch in Architecture(40)

Two year full time PG(ME) courses

(1) Civil:

- Construction Technology(10)
- Geo-Technical Engineering(12)
- Structural Engineering(14)
- Highway Engineering(10)
- Pre - Stressed Concrete(10)
- Water Resource Engineering(10)
- Environmental Engineering(10)
- Earthquake Engineering(18)

(2) Electrical:

- Power and Energy Systems(14)
- Power Electronics(18)
- Control and Instrumentation(18)

(3) Electronics:

- Electronics & Communication(25)

(4) Mechanical:

- Machine Design(18)
- Manufacturing Science Engineering(18)
- Thermal Science Engineering(18)
- Advanced Material Technology(18)

(5) Computer Science:

- Computer Science Engineering(18)
- Information Technology(25)
- Software Engineering(18)
- Computer Networking(18)
- Bioinformatics(18)
- Web Technologies(18)

(6) Architecture:

- Landscape Architecture(18)

- Construction & Project Management(18)

Three year part time evening UG(BE) courses

(1) Mechanical Engineering(60)
(2) Electronics & Communication Engg(60)

- Government of India UG Exchange programme(35).
- M.Sc(Engg) by Research, three year full time Ph.D, four year part time Ph.D programmes in all disciplines and Ph.D(QIP) programme in Civil Engineering.

Intake: Total(1159) BE(470) BArch(40) ME(392)   BE Evening(120) GOI(35)   Ph.D(102)

Note: These numbers are from 2014-15 and may vary by some number in recent years

College of Engineering Pune – A case study

Being one of the premier technological institutes in the country COEP, has been working closely with industry partners with the objective of adding value to the curriculum, the larger goal being to make our students industry ready who would further bring in novel solutions to the society at large. The industry- Institute Interaction at COEP is highly acclaimed by various industry bodies such as NASSCOM, CII and FICCI. The transformation of COEP from a non autonomous college to an institute providing quality technological and scientific education and an environment conducive to new and path breaking research and development in frontier areas of engineering, technology and science with an excellent Governance model is not only acknowledged by the State Government but also by the Central Government. As a result we are bestowed with the responsibility of being the Mentor Institute under the AICTE's 'Margadrashan' programme for 10 Mentee Colleges and under TEQIP-Phase-III for 2 Institutes namely SGS Institute of Technology and Science- Indore-Madhya Pradesh and Manipur Technical University, Imphal.

The institute was ranked by National Institution Ranking Framework (NIRF) 2019 at the 49th position amongst top 100 institutes under Engineering Category and 91st position amongst top 100 institutes under Overall category competing with IITs and NITs.

COEP has a legacy of 165 years pursuing excellence and has continually re-invented itself in terms of academic programmes and research infrastructure. The presence of state- of- the art research facilities, strong institute-industry collaborations, students and faculty exchange programmes, interdisciplinary research collaborations, industry required curriculum, placements and industrial training opportunities help the students to excel and be ahead in the competitive professional environment. As of now, the institute has 12 academic departments and 2 Centers of excellence namely Signal and Image Processing and Smart Renewal Energy Systems supported by TEQIP. The Institute offers 9 Under-graduate courses in engineering, 24 Post-graduate courses in engineering, besides Ph.D. degree programmes in all the disciplines and One year PG Diploma courses in ERP and Additive Manufacturing.

COEP has more than 4500 students enrolled to its various courses. COEP, today, has 237 regular faculty including Professor Emeritus of which 136 posses PhD degrees and many are working towards it. In addition there are large number of reputed experts from industry as Adjunct Faculty to cater to the needs of all our programmes. 8 out of the 9 eligible undergraduate and 22 post graduate programmes run by the institute have been accredited by the National Board of Accreditation in the new outcome based tier-I format earning the honour of being the only institute to have achieved this feat in India so far.

COEP Administration Structure

Under this section:
- Board Of Governor's
- Planning and Evaluation Committee
- Finance Committee
- Academic Council
- Director
- Deputy Director
- Deans
- Heads of Departments
- Institute Functionaries
- Administrative Officers
- Administrative Staff
- Webteam

Sanctioned (Approved) Intake

Academic Year	2017-18	2016-17	2015-16	2014-15	2013-14	2
UG [4 Years Program(s)]: Sanctioned (approved) students intake	756	756	756	756	---	--
PG [2 Years Program(s)]	475	475	---	---	---	--

Total Actual Student Strength (Program(s) Offered by Your Institution)

(All programs of all years)	No. of Male Students	No. of Female Students	Total Students	Within State (Including male & female)	Outside State (Including male & female)	Outside Country (Including male & female)	Economically Backward (Including male & female)	Socially Challenged (SC+ST+OBC Including male & female)	No. of students receiving full tuition fee reimbursement from the State and Central Government	No. of students receiving full tuition fee reimbursement from Institution Funds	No. of students receiving full tuition fee reimbursement from the Private Bodies	No. who rece tuiti reim
UG [4 Years Program(s)]	2252	1081	3333	3018	69	246	135	1634	1363	98	148	160
PG [2 Years Program(s)]	683	215	898	842	55	1	0	459	285	58	8	108

Placement & Higher Studies

UG [4 Years Program(s)]: Placement & higher studies for previous 3 years

Academic Year	No. of first year students intake in the year	No. of first year students admitted in the year	Academic Year	No. of students admitted through Lateral entry	Academic Year	No. of students graduating in minimum stipulated time	No. of students placed	Median salary of placed graduates (Amount in Rs.)	No. of s selectec Higher S
(2012-13)	756	732	(2013-14)	123	(2015-16)	734	639	650000 (Six Lakhs Fifty Thousand)	84
(2013-14)	756	739	(2014-15)	137	(2016-17)	752	570	650000 (Six Lakhs Fifty Thousand)	162
(2014-15)	756	702	(2015-16)	138	(2017-18)	728	584	650000 (Six Lakhs Fifty Thousand)	60

PG [2 Years Program(s)]: Placement & higher studies for previous 3 years

Academic Year	No. of first year students intake in the year	No. of first year students admitted in the year	Academic Year	No. of students graduating in minimum stipulated time	No. of students placed	Median salary of placed graduates (Amount in Rs.)	No. of student for Higher Stu
(2014-15)	427	424	(2015-16)	391	194	770000 (Seven Lakhs Seventy Thousand)	7
(2015-16)	427	425	(2016-17)	373	252	710000 (Seven Lakhs Ten Thousand)	12
(2016-17)	475	465	(2017-18)	412	243	700000 (Seven Lakhs)	9

Financial Resources: Utilised Amount for the Capital & Operational expenditure for previous 3 years

Financial Year	2017-18	2016-17	2015-16
	Utilised Amount	Utilised Amount	Utilised Amou
Annual Capital Expenditure on Academic Activities and Resources (excluding expenditure on buildings)			
Library	9290954 (Rupees Ninety Two Lakhs Ninety Thousand Nine Hundred and Fifty Four)	14804753 (Rupees One Crore Forty Eight Lakhs Four Thousand Seven Hundred and Fifty Three)	15947514 (Rupees One Nine Lakhs Forty Seven Five Hundred and Fourt
New Equipment for Laboratories	37480406 (Rupees Three Crore Seventy Four Lakhs Eighty Thousand Four Hundred and Six)	84291962 (Rupees Eight Crore Forty Two Lakhs Ninety One Thousand Nine Hundred and Sixty Two)	55283698 (Rupees Five Two Lakhs Eighty Three Six Hundred and Ninety
Engineering Workshops	16229391 (Rupees One Crore Sixty Two Lakhs Twenty Nine Thousand Three Hundred and Ninety One)	7439130 (Rupees Seventy Four Lakhs Thirty Nine Thousand One Hundred and Thirty)	3086378 (Rupees Thirty ty Six Thousand Three H d Seventy Eight)
Other expenditure on creation of Capital Assets (excluding expenditure on Land and Building)	123017157 (Rupees Twelve Crore Thirty Lakhs Seventeen Thousand One Hundred and Fifty Seven)	25772384 (Rupees Two Crore Fifty Seven Lakhs Seventy Two Thousand Three Hundred and Eighty Four)	7794958 (Rupees Seven khs Ninety Four Thousa ndred and Fifty Eight)
Annual Operational Expenditure			

Financial Year	2017-18	2016-17	2015-16
	Utilised Amount	Utilised Amount	Utilised Amou
Salaries (Teaching and Non Teaching staff)	434319248 (Rupees Forty Three Crore Forty Three Lakhs Nineteen Thousand Two Hundred and Forty Eight)	412622247 (Rupees Forty One Crore Twenty Six Lakhs Twenty Two Thousand Two Hundred and Forty Seven)	473823650 (Rupees Forty ore Thirty Eight Lakhs Tv e Thousand Six Hundred
Maintenance of Academic Infrastructure or consumables, other running expenditures etc. (excluding maintenance of hostels and allied services)	341606802 (Rupees Thirty Four Crore Sixteen Lakhs Six Thousand Eight Hundred and Two)	329189275 (Rupees Thirty Two Crore Ninety One Lakhs Eighty Nine Thousand Two Hundred and Seventy Five)	293554023 (Rupees Twe rore Thirty Five Lakhs Fi ousand and Twenty Thr
Seminars/Conferences/Workshops	6935761 (Rupees Sixty Nine Lakhs Thirty Five Thousand Seven Hundred and Sixty One)	14392985 (Rupees One Crore Forty Three Lakhs Niety Two Thousand Nine Hundred and Eighty Five)	6007277 (Rupees Sixty L n Thousand Two Hundr enty Seven)

IPR

Calendar year	2017	2016	2015
No. of Patents Published	9	9	9
No. of Patents Granted	1	0	1

Sponsored Research Details

Financial Year	2017-18	2016-17	2015-16
Total no. of Sponsored Projects	39	28	9
Total no. of Funding Agencies	16	15	5
Total Amount Received (Amount in Rupees)	39352500	46730000	12654000
Amount Received in Words	Rupees Three Crore Ninety Three Lakhs Fifty Two Thousand and Five Hundred	Rupees Four Crore Sixty Seven Lakhs Thirty Thousand	Rupees One Crore Twenty Six Lakh our Thousand

Consultancy Project Details

Financial Year	2017-18	2016-17	2015-16
Total no. of Consultancy Projects	368	382	260
Total no. of Client Organizations	307	331	212
Total Amount Received (Amount in Rupees)	62508899	51274007	25252345
Amount Received in Words	Rupees Six Crore Twenty Five thousand Eight Hundred and Ninety Nine	Rupees Five Crore Twelve Lakh Seventy Four Thousand and Seven	Rupees Two Crore Fifty Two Lakhs Fifty Two Three Hundred and Forty Five

From 2003 onwards, with support from the World Bank's Technical/Engineering Education Quality Improvement Project (TEQIP), the institute revamped its curriculum, installed the latest lab equipment, and boosted research. It collaborated with industry and foreign universities, and set up an incubator to promote entrepreneurship.

"Today, some of the most sought-after employers – Amazon, Microsoft, Google, Yahoo and others - line up at our door for placement," explained Dr. Sandeep Meshram who looks after campus placement.

So, what made the difference? In one word – autonomy. Autonomy from the state on academic, financial, administrative and managerial matters.

"Unless institutes have the autonomy to determine their goals and priorities, curriculum, and methods to evaluate students, they are unlikely to succeed in preparing India's young people for the jobs of tomorrow. Nor will they be able to encourage innovation and lay the foundations for lifelong learning, which will be the hallmark for success in the future," said Francisco Marmolejo, the World Bank's global lead in tertiary education.

Revamping the curriculum

In 2003, as a precondition for being a part of the World Bank project, the Government of Maharashtra granted Pune's College of Engineering complete autonomy. Once it became autonomous, the institute first pinned down where it needed to improve.

Under the visionary leadership of Dr. F.C. Kohli, the then head of its Board of Governors, the college took IIT Mumbai as its role model, abandoned its curriculum altogether, and replaced it with one similar to its mentor institute.

Next, to deliver the new curriculum, 19 faculty members were sent to IIT Mumbai for intensive training. After this, IIT Mumbai's lectures were beamed live into the Pune classrooms. "This resulted in a quantum leap in our standards of teaching," explained Dr. B.B. Ahuja, the college's director.

"This kind of resource-sharing is very important, especially since higher education is an extremely resource-intensive sector," explained Tara Béteille, the World Bank's project leader. "India has nearly 40,000 institutes of higher education spread across the country, and this kind of sharing can help many of them improve their standards of teaching."

Today, COEP frames its own curriculum and revises it regularly with feedback from faculty, students, the college placement cell, as well as from industry. "Way back in 2007, Dr. Kohli saw the importance of bio-medical engineering, and introduced a new course in biology," said Dr. Ahuja. This has since been followed by other such institutes, including IIT Mumbai. COEP now plans to introduce a number of other multi-disciplinary courses.

Empowering the faculty

COEP has also begun to recruit its own faculty. This has helped reduce teacher vacancies, which often plague many institutes, and enabled the college to promote their professional development. For instance, in 2003 there were just 99 faculty members; now there are a full complement of 220. Today, with the institute's support, 55 percent of COEP's faculty hold doctoral degrees, compared to just 5 percent earlier. What's more, with no transfers for the past 14 years, teachers have been able to focus on research. They also receive financial support to file patents and commercialize the products they create, explained Dr Ahuja.

Greater focus on research

Financial autonomy has also enabled the institute to buy new lab equipment. "Earlier, our equipment was so old, we used to be known as the museum of engineering," smiled Prof M.J. Rathod, professor of metallurgy and materials science. Now many labs are open 24 X 7, enabling PhD students from across Maharashtra to complete their theses. The number of publications has also shot up from just 500 in 2003-04 to over 1,600 today. In addition, 42 patents have been applied for, of which seven have been granted. Moreover, since researchers from industry and elsewhere pay to use COEP's equipment, the college is able to pay for its maintenance.

Collaboration with industry and foreign universities

Since Pune is a major hub for high-end manufacturing, the college has taken full advantage of its strategic location to make student learning relevant for the real world. "In every department, two labs have been set up by industry. In addition, each department has an industry advisory board that charts out students' future learning needs. Also, many opportunities have come up for collaborative research with industry," explained Dr. Meshram, the institute's corporate relations officer. "In addition, some 10 -12 industries provide student scholarships totaling over Rs 1 crore."

To broaden the students' learning experience, collaborations with foreign universities such as Nanyang Technical University in Singapore and the University of Westphalia in Germany have also been initiated. "We started collaborating with Israel on cyber security some years ago, and now we run a full-fledged master's program in the subject," added Dr. Mukul Sutaone, dean of academics.

A new incubator, and hand-holding by alumni

Given the importance of innovation in today's world, 'entrepreneurship' has been a buzz word at the institute since 2009. Alumni have been delivering courses on the subject for some time now and, recently, have contributed to the setting up of an incubator –the Bhau Institute of Innovation, Entrepreneurship and leadership (BIEL). The aptly named institute - 'Bhau' means older brother in Marathi- has begun to help young start-ups turn their ideas into viable businesses; over the past four years the institute has helped 393 startups to take off.

The critical role of the board of governors

"None of this would have been possible without the visionary leadership of the college's Board of Governors, especially its Chairman Dr. F.C. Kohli," said Prof. Ahuja. "Every board member has led from the front, giving a minimum of 100 hours of their time each year with passion and energy. They have been receptive to new ideas from the bottom-up, and given quick decisions with transparency and openness."

"TEQIP too has come as a shot of oxygen, helping us unleash our latent potential," added Prof Chaudhuri, the institute's deputy director. "Now, we are ready to mentor another 50 institutions on the path to excellence."
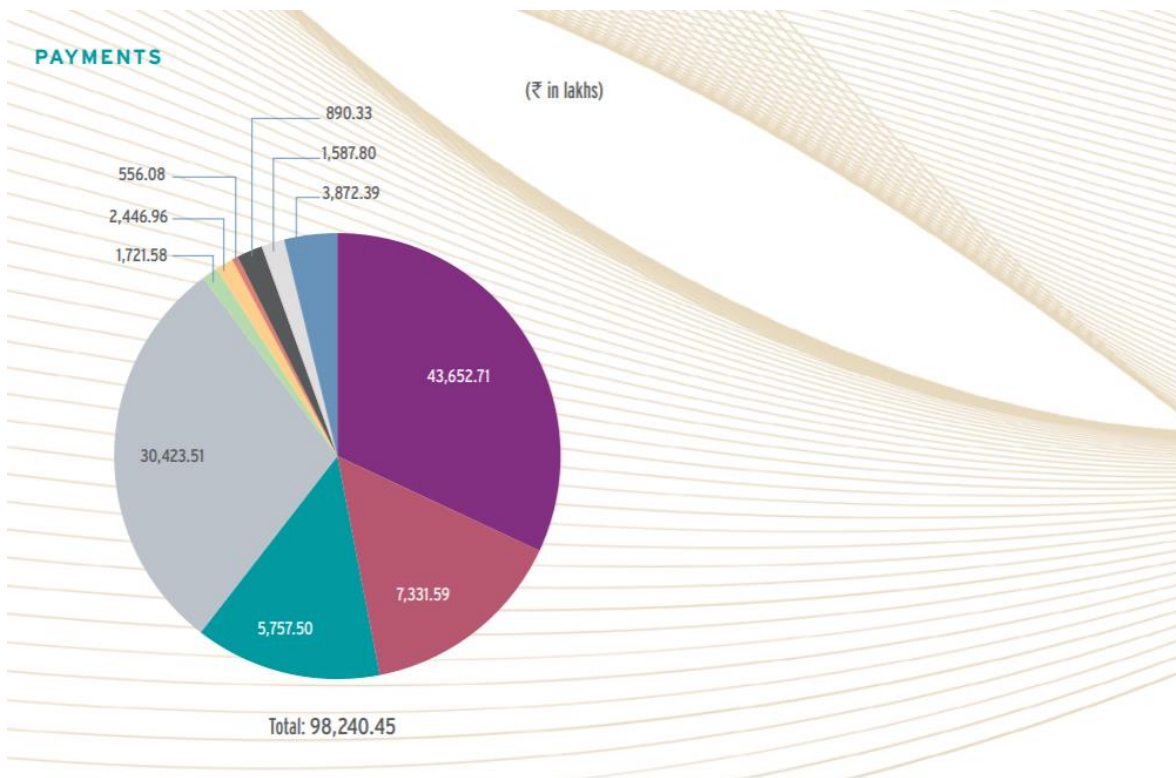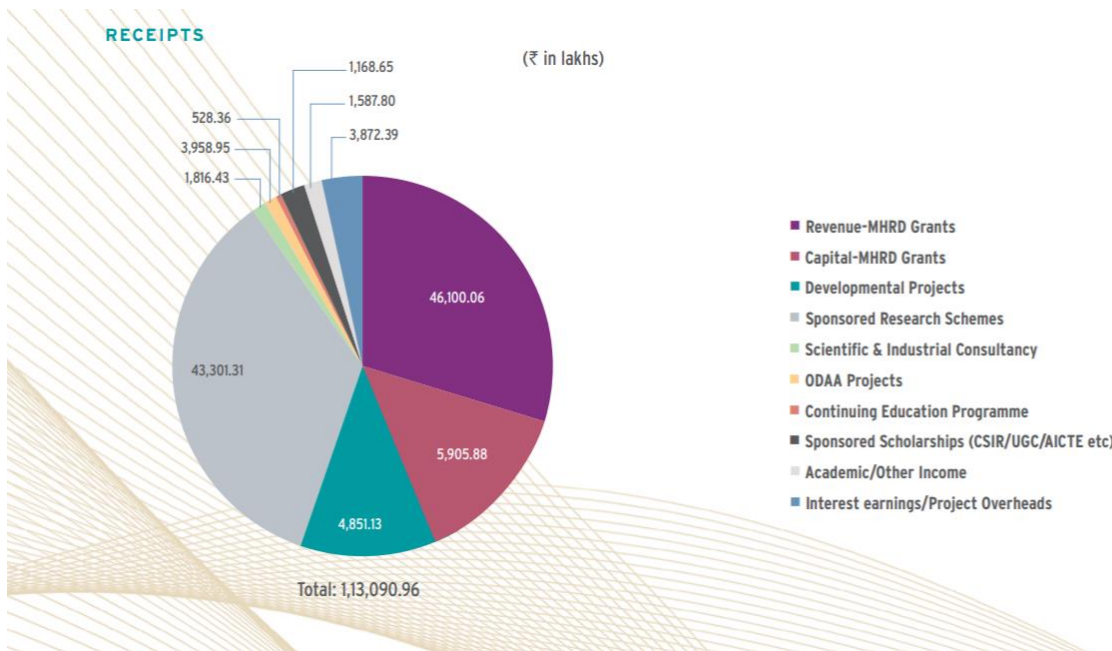
There is no reason why other colleges too cannot deliver education to the same high standards. And, perhaps be the next to launch a satellite into space.

Summary:
- While India is said to produce the world's largest number of engineers, only a few of its engineering institutes rank among the best internationally.
- At the College of Engineering in Pune, the quality of teaching improved significantly once the Government of Maharashtra granted it complete autonomy.
- A revamped curriculum, an empowered faculty, the latest lab equipment, and greater collaborations with industry and foreign universities have boosted research and promoted entrepreneurship. Now some of the most sought-after employers visit the campus for placement.

- URL for Annual Report 2019 - https://bit.ly/2kNivw6
- URL for complete Report - http://www.coep.org.in/download/file/fid/4117
- URL for World Bank Report - https://www.worldbank.org/en/news/feature/2017/07/20/college-engineering-pune-raises-bar-engineering-education-india

IISc Finance (as per 2017-18 Report)

RECEIPTS

(₹ in lakhs)

- 1,168.65
- 1,587.80
- 3,872.39
- 528.36
- 3,958.95
- 1,816.43
- 46,100.06
- 43,301.31
- 4,851.13
- 5,905.88

Total: 1,13,090.96

Legend:
- ■ Revenue-MHRD Grants
- ■ Capital-MHRD Grants
- ■ Developmental Projects
- ■ Sponsored Research Schemes
- ■ Scientific & Industrial Consultancy
- ■ ODAA Projects
- ■ Continuing Education Programme
- ■ Sponsored Scholarships (CSIR/UGC/AICTE etc)
- ■ Academic/Other Income
- ■ Interest earnings/Project Overheads

PAYMENTS

(₹ in lakhs)

- 890.33
- 1,587.80
- 556.08
- 3,872.39
- 2,446.96
- 1,721.58
- 43,652.71
- 30,423.51
- 5,757.50
- 7,331.59

Total: 98,240.45

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The Ministry of Human Resource Development provides Revenue and Capital Grants to the Institute for meeting revenue expenditure & for creating Capital assets respectively. The Institute also receives funds from other Government agencies like DST/DBT/CSIR etc, for Extra Mural Research. The UGC/DST also release grants for research in emerging areas & for expansion of Infrastructure under Centre for Advanced Study/ FIST Programmes, respectively.

The total receipts covering all major areas for the year 2017-18 was Rs. 1,13,090.96 lakhs and the payments for various activities of the Institute was Rs. 98,240.45 lakhs.

THE DETAILS OF RECEIPTS AND PAYMENTS FOR THE YEAR 2017-18 ARE AS FOLLOWS:

Sl. No.	Particulars	Receipts	Payments
1	Revenue - MHRD Grants	46,100.06	43,652.71
2	Capital - MHRD Grants	5,905.88	7,331.59
3	Developmental Projects	4,851.13	5,757.50
4	Sponsored Research Schemes	43,301.31	30,423.51
5	Scientific & Industrial Consultancy	1,816.43	1,721.58
6	ODAA Projects	3,958.95	2,446.96
7	Continuing Education Programme	528.36	556.08
8	Sponsored Scholarships (CSIR/UGC/AICTE etc)	1,168.65	890.33
9	Academic/Other Income	1,587.80	1,587.80
10	Interest earnings/Project Overheads	3,872.39	3,872.39
	Total	**1,13,090.96**	**98,240.45**

Salaries & Allowances	23,669.80
Research Associateship	6,146.10
Working Expenses	15,424.61
Total	**45,240.51**

IIT Madras Finance (As per 2017-18 Report)

C   Grants in aid

Out of the total grant of ₹ 1150.08 crore received during the year, internal revenue of ₹ 111.54 crore and ₹ 208.42 crore being the unspent grant of the previous year (totaling ₹ 1470.04 crore) the Institute could utilize ₹ 1140.22 crore leaving a balance of ₹ 329.82 crore as on 31st March 2018.

Grants in aid statement for the year 2017-18 (Based on revised Accounts)

Rupees in Crores

Grants	Amount of Grant brought forward from previous year 2016-17	Amount of Grant received during the year 2017-18	Internal Revenue Generation	Total	Grants Utilized during the year 2017-18	Grants remaining Unutilized as on 31-03-018 carried forward to next year
Capital Grants	-36.59	271.21	0.00	234.62	233.78	0.84
Revenue Grants	-6.53	434.20	79.76	507.43	531.20	-23.77
Projects	251.54	444.67	31.78	727.99	375.24	352.75
Total	**208.42**	**1,150.08**	**111.54**	**1,470.04**	**1,140.22**	**329.82**

INDIAN INSTITUTE OF TECHNOLOGY MADRAS			
BALANCE SHEET AS ON 31.03.2018			
SOURCES OF FUNDS	Schedule	Current Year 2017-18	Previous Year 2016-17
Capital Fund	1	4,12,40,569	272,40,97,967
Corpus Fund	1A	224,36,13,387	203,35,68,307
Designated/Earmarked/Endowment Funds	2	792,17,05,999	625,58,23,184
Current Liabilities & Provisions	3	1569,69,77,614	1080,22,06,027
Total		2590,35,37,569	2181,56,95,485

APPLICATION OF FUNDS	Schedule	Current Year 2017-18	Previous Year 2016-17
FIXED ASSETS:	4		
Tangible Assets		1170,66,83,696	959,89,55,105
Intangible Assets		7,45,78,319	7,54,29,263
Capital Works-in-Progress		194,20,22,675	282,71,38,314
Investments from Earmarked/Endowment Funds	5	830,22,77,563	583,19,48,491
Investments - Others	6	0	0
Current Assets	7	280,66,94,802	238,62,92,528
Loans, Advances & Deposits	8	107,12,80,514	109,59,31,784
Total		2590,35,37,569	2181,56,95,485

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2018

Particulars	Schedule	Current Year 2017-18	Previous Year 2016-17
INCOME			
Academic Receipts	9	61,16,52,085	54,70,54,443
Non-Plan Grants/Subsidies - 434,20,00,000 Less: Utilised for purchase of - 1,12,53,131 Fixed assets	10	433,07,46,869	294,19,50,303
Income from Investments	11	2,82,06,458	3,12,27,783
Interest earned/Accrued	12	2,44,569	14,38,790
Other Income	13	15,75,01,223	14,69,27,866
Prior Period Income	14	0	0
Total (A)		512,83,51,204	366,85,99,185
EXPENDITURE			
Staff Payments & Benefits (Establishment expenses)	15	737,05,62,435	347,66,80,912
Academic Expenses	16	139,48,99,794	38,74,52,314
Administrative and General Expenses	17	45,58,28,278	40,00,17,518
Transportation Expenses	18	29,72,943	85,99,403
Repairs & Maintenance	19	21,97,92,329	27,84,09,375
Finance Costs	20	0	0
Depreciation	4	62,57,88,503	58,76,97,639
Other Expenses	21	0	0
Prior Period Expenses	22	0	0
Total (B)		1006,98,44,282	513,88,57,161
Balance being excess of Income over Expenditure (A-B)			
Transfer to/from Designated Fund		0	0
Building Fund		0	0
Others (specify)		0	0
Balance being Surplus/(Deficit) carried to Capital Fund		-4,94,14,93,078	-1,47,02,57,976

Technology Enabled Curriculum @ BITS Pilani

In 2013, Birla Institute of Technology and Science (BITS), Pilani, India's premier independent University, along with BITSAA, its global alumni association, launched a first of its kind multi-million dollar cross-campus technology initiative named BITSConnect 2.0. Pioneering a unique model of multi-campus education in India, the initiative comprises Immersive Telepresence, High-definition Video Conferencing and Live Streaming technologies that are set to transform the learning experience by connecting all campuses at an unprecedented scale. This University-Alumni initiative was launched simultaneously at Pilani, Goa and Hyderabad campuses, while being connected to Cisco's offices in San Jose and Boston, jointly by Prof. Bijendra Nath Jain, Vice Chancellor, BITS Pilani and Raju Reddy, Chairman, BITSAA, in the presence of His Excellency the Governor of Goa, Shri Bharat Vir Wanchoo and Shri J Satyanarayana, Secretary, Department of IT, Government of India.

BITS Pilani aspires to be among the top research-driven institutions in Asia by 2020. On course to realize its vision, BITS Pilani became one of the first Indian universities to set up IP Telephony, Gigabit Ethernet and Wireless accessibility on campus with BITSConnect 1.0 in 2003. With this latest initiative, the University takes a giant leap forward in using technology for education. By bridging the geographical distance across campuses and global knowledge centers, this platform will facilitate collaboration among its faculty, students, industry partners and alumni, for education, research and mentorship.

During that particular semester, BITS Pilani offered more than 14 specialized electives to 1000s of students across its campuses by professors working from any of its campuses. To collaborate, faculty and staff no longer needed to travel. Academicians from across the world

will be able to collaborate with and mentor research projects in BITS via Immersive Telepresence.

Industrial Consultancy and Sponsored Research @ IIT Madras

Through industrial consultancy, faculty and staff undertake assignments for industry that may include project design, testing and evaluation, or training in new areas of industrial development. Industries and organizations request the IIT faculty to undertake assignments channeled through the Centre For Industrial Consultancy and Sponsored Research (ICSR).

National organizations sponsor programmes of research by funding projects undertaken by the faculty. Such research is time bound and allows project participants to register for a degree. Project proposals are usually prepared by the IIT faculty and forwarded to interested organizations, based on the nature of their research and their interest to fund such projects.

Sponsored projects are often vehicles for new resources within departments, and often permit their project staff to register for academic degrees in the institute. All sponsored research activities at the institute are coordinated by ICSR.
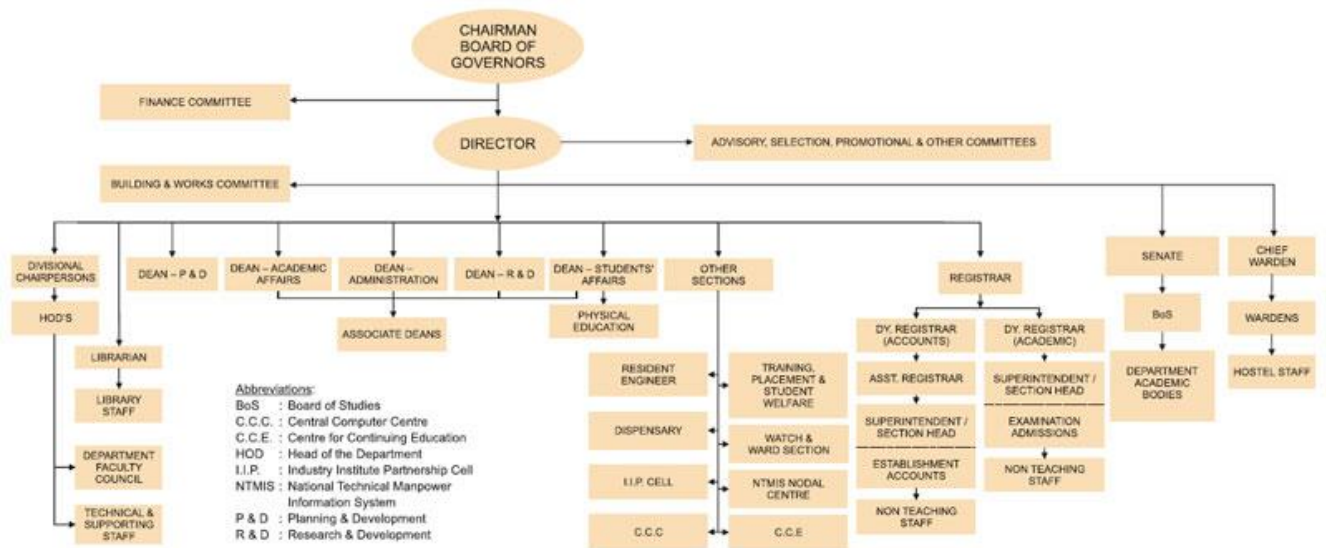
One of the first experiments - The IIT Madras Research Park, the first of its kind to be established in India, functions to propel successful innovation in established companies and provide a nurturing ecosystem to startups through incubation efforts and technical infrastructure.
IIT Madras Research Park endeavour to enable companies with a research focus to set up a base in the Park and leverage the expertise of IIT Madras. It is modeled the lines of successful Research Parks such as Stanford, MIT and Harvard. These technology parks have been known to add value and impetus to industry and business enterprises. The macro guiding principles behind the park are:
- Creating a collaborative environment between industry and academia through joint research projects and consulting assignments
- Creating a self-sustaining and technologically fertile environment
- Encouraging and enabling R & D activities that are aligned to potential needs of the industry.
- Providing world class infrastructure for R & D activities.
- Enabling development of high quality personnel and motivating professional growth for researchers in the companies through part time Masters and PhD Programs.

IIT Madras Research Park has a proprietary CREDIT system to measure the extent of collaboration between a company and IIT Madras. CREDIT is an acronym for Collaboration in Research and Engagement with Departments in IIT Madras. The Research Park is not a real estate proposition. It is an ecosystem that facilitates R&D and innovation. Success is premised upon adequate engagement between the companies and IIT Madras. The CREDIT system merely ensures that the necessary level of engagement continues on a sustained basis to ensure the companies benefit out of the ecosystem. Hence each company has to earn a certain minimum number of Credits each year depending on the space occupied.

NITK Model - Administration

Abbreviations:
BoS   : Board of Studies
C.C.C. : Central Computer Centre
C.C.E. : Centre for Continuing Education
HOD   : Head of the Department
I.I.P. : Industry Institute Partnership Cell
NTMIS : National Technical Manpower
          Information System
P & D : Planning & Development
R & D : Research & Development

Review

A self review of the Institutional governance is regularly conducted at NITK as per the guidelines of TEQIP Good Practice Guide for Governing Bodies, December 2012.

- PRIMARY ACCOUNTABILITIES
  - Has the Governing Body approved the institutional strategic vision, mission and plan-identifying a clear development path for the institution through its long term business plans and annual budgets?
  - Has the Governing Body ensures the establishment and monitoring of proper, effective and efficient systems of control and accountability to ensure financial sustainability (including financial and operational controls, risk assessment and management, clear procedures for managing physical and human resources.)
  - Is the Governing Body monitoring institutional performance and quality assurance arrangements? Are these benchmarked against other institutions (including accreditations, and alignment with national and international quality assurance systems) to show that they are broadly keeping pace with the institution they would regard as their peers and competitors to ensure and enhance institutional reputation?
  - Has the Governing Body put in place suitable arrangements for monitoring the head of the institution's performance?
- OPENNESS & TRANSPARENCY IN THE OPERATION OF GOVERNING BODIES
  - Does the Governing Body publish an annual report on institutional performance?
  - Does the Governing Body maintain, and publicly disclose a register of interest of members of its governing body?
  - Is the Governing Body conducted in an open manner, and does it provide as much information as possible to students, faculty, the general public and potential employers on all aspects of institutional activity related to academic performance, finance and management?
- KEY ATTRIBUTES OF GOVERNING BODIES
  - Are the size, skills, competences and experiences of the Governing Body such that it is able to carry out its primary accountabilities effectively and efficiently, and ensure the confidence of its stakeholders and constituents?
  - Are the recruitment processes and procedures for governing body members rigorous and transparent? Does the Governing Body have actively involved independent members and is the institution free from direct political interference to ensure academic freedom and focus on long-term educational objectives?

- - - o Are the role and responsibilities of the Chair of the Governing Body, the Head of the Institution and the Member Secretary serving the governing body clearly stated?
    - o Does the Governing Body meet regularly? Is there clear evidence that members of the governing body attend regularly and participate actively?
  - EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES
    - o Does the Governing Body keep their effectiveness under regular review and in reviewing it's performance, reflect on the performance of the institution as a whole in meeting its long-term strategic objectives and its short-term indicators of performance/success?
    - o Does the Governing Body ensure that new members are properly inducted, and existing members receive opportunities for further development as deemed necessary?
  - REGULATORY COMPLIANCE
    - o Does the Governing Body ensure regulatory compliance and subject to this, take all final decisions on matters of fundamental concern to the institution.
    - o Does the regulatory compliance include demonstrating compliance with the 'not-for-profit' purpose of education institutions?

Has there been accreditation and /or external quality assurance by a national or professional body? If so, give details: name, status of current accreditation etc.

NAAC

The NAAC has identified the following seven criteria to serve as the basis for assessment of Higher Education Institutions:

1. Curricular Aspects
2. Teaching-Learning and Evaluation
3. Research, Consultancy and Extension
4. Infrastructure and Learning Resources
5. Student Support and Progression
6. Governance, Leadership and Management
7. Innovations and Best Practices

KEY ASPECTS

> **1.1(U)* Curriculum Design and Development**
> *(For Universities and Autonomous Colleges)*
> **1.1(A)* Curriculum Planning and Implementation**
> *(For Affiliated/Constituent Colleges)*
> **1.2 Academic flexibility**
> **1.3 Curriculum Enrichment**
> **1.4 Feedback System**
>
> *
> (U)- *applicable only for Universities and Autonomous Colleges*
> (A)- *applicable only for the Affiliated/Constituent Colleges*

KEY ASPECTS

2.1 Student Enrolment and Profile

2.2 Catering to Student Diversity

2.3 Teaching-Learning Process

2.4 Teacher Quality

2.5 Evaluation Process and Reforms

2.6 Student Performance and Learning Outcomes

KEY ASPECTS

3.1 Promotion of Research

3.2 Resource Mobilization for Research

3.3 Research Facilities

3.4 Research Publications and Awards

3.5 Consultancy

3.6 Extension Activities and Institutional Social Responsibility

3.7 Collaborations

KEY ASPECTS

4.1 Physical Facilities

4.2 Library as a Learning Resource

4.3 IT Infrastructure

4.4 Maintenance of Campus Facilities

KEY ASPECTS

5.1 Student Mentoring and Support

5.2 Student Progression

5.3 Student Participation and Activities

6.1 Institutional Vision and Leadership

6.2 Strategy Development and Deployment

6.3 Faculty Empowerment Strategies

6.4 Financial Management and Resource Mobilization

6.5 Internal Quality Assurance System (IQAS)

KEY ASPECTS

7.1 Environment Consciousness

7.2 Innovations

7.3 Best Practices

The entire score is for 1000 points (specific metrics will be followed for each of the key aspects) The accreditation status of the assessed HEIs is decided using the weightages detailed above. Institutions will be assessed and graded on a four point scale and qualifying institutions accredited and graded on a 3- letter grade as follows:

Range of institutional Cumulative Grade Point Average (CGPA)	Letter Grade	Performance Descriptor
3.01-4.00	A	Very Good (Accredited)
2.01-3.00	B	Good (Accredited)
1.51-2.00	C	Satisfactory (Accredited)
≤ 1.50	D	Unsatisfactory (Not Accredited)

NAAC Assessment Process

- On-line submission of Letter of Intent (LoI) and/or application for Institutional Eligibility for Quality Assessment (IEQA)
- Preparation of the Self-Study Report (SSR)
- Peer Assessment and Final Outcome

UGC Guidelines

Eligibility

- All Colleges (of any discipline) under Section 2(f) of the UGC Act whether aided, partially aided and unaided/self financing are eligible to apply for autonomous status;
- The colleges can apply for autonomy after they have completed minimum 10 years of Existence;
- The College must have valid NAAC accreditation with a minimum of 'A' Grade for being considered for fresh induction /extension of autonomous status;
- In respect of Engineering/Technical/Management Colleges, current NBA accreditation for at least three courses is mandatory;
- For existing autonomous college before they seek extension of autonomous status they must be accredited with 'A' Grade by NAAC;
- For colleges which were accredited with 'A' Grade by NAAC earlier and seek extension of the autonomous status must give a proof of having applied for accreditation by NAAC/NBA to be considered. However, the extension will be subject to the College getting reaccredited with 'A' Grade by NAAC along with approval by NBA for atleast three courses in case of Engineering/Technical/Management Colleges;
- In case of constituent colleges the same may undergo for separate accreditation by NAAC to be considered;
- The colleges which have only NBA accreditation must undergo NAAC accreditation within 2 years of conferment of the autonomous status; and
- The number of contractual faculty shall not be more than 10% of the total number of faculty position in the College as required in UGC Regulations on minimum 5 Qualifications for appointment of Teachers and other Academic Staff in Universities and Colleges and measures for the maintenance of standards in higher education, 2010 as amended from time to time.

CRITERIA FOR GRANTING AUTONOMY TO COLLEGES

- Academic reputation and previous performance in university examinations and its academic/co-curricular/extension activities in the past.
- Academic/extension / research achievements of the faculty.
- Quality and merit in the selection of students and teachers, subject to statutory requirements in this regard.
- Adequacy of infrastructure, for example, library, equipment, accommodation for academic activities, etc.
- Quality of institutional management.
- Financial resources provided by the management/state government for the development of the institution.
- Responsiveness of administrative structure.
- Motivation and involvement of faculty in the promotion of innovative reforms.
- Hostel facilities