OFFICIAL TRANSCRIPT CERTIFICATE OF Mr. SANSKAR BHATTACHARYA

This is to certify that **Mr. Sanskar Bhattacharya** was a bona-fide student of MIT Academy of Engineering (MIT AOE), Alandi (D), Pune (Formerly known as Maharashtra Academy of Engineering) from year August 2012 to June 2016. MITAOE is affiliated to the Savitribai Phule Pune University. He has completed a four-year Bachelor's Degree program in Mechanical Engineering. Each academic year consists of two semesters and examinations were conducted thrice in one semester, two online examinations and one theory end-term examination in the first two years. For the final two years, there is one theory mid-term examination and one theory end-term examination every semester.

Sanskar Bhattacharya successfully completed eight semesters of the above-mentioned Bachelor's Degree program in the Mechanical Engineering course in June 2016 from Savitribai Phule Pune University. His Permanent Registration Number is 71310857G.

The official transcript containing marks statements of the all the eight semesters he has finished till date are hereby issued.

In order to enable your University to review the application of **Sanskar Bhattacharya**, we feel that it is necessary to brief you about Savitribai Phule Pune University, MITAOE and the grading system while forwarding the transcripts.

Yours Sincerely

Dr. Y. J. Bhalerao Director MIT Academy of Engineering (MIT AOE), Alandi Pune-412105 India.

Savitribai Phule Pune University

About The Savitribai Phule Pune University

The Savitribai Phule Pune University (SPPU) is located in the City of Pune in Maharashtra State and has the reputation as a leading center for research. Pune is known as the Educational capital of India. SPPU was established on 10th of February 1949 and is rated among the '**Top 10**' Universities in India. It conducts undergraduate, graduate and post graduate research program/courses in Arts, Commerce, and Science education and other Faculties and professional courses for Engineering and Technology, Medical Sciences and Business Administration.

The campus of the University is spread over an area of 411 acres and is set in sylvan surroundings with its 41 postgraduate departments. There are more than 224 affiliated colleges and more than 118 recognized research Institutes. Around 200000 students are pursuing their studies in various colleges and institutes under Savitribai Phule Pune University. Apart from Bachelors, Masters and Ph.D. programs, there are a large number of certificate and diploma courses in various disciplines offered by the university.

The University also houses IUCAA (Inter-University Center for Astronomy and Astrophysics) and NCRA (National Center for Radio Astrophysics) which is currently engaged in Giant Meter Wave Radio Telescope Projects, the largest of its kind in the world. The C-DAC (Center for Development of Advanced Computing) has indigenously developed super computer "PARAM" which is the pride of the university and the nation.

Admission Procedure for Engineering.

The Savitribai Phule Pune University follows a centralized admission procedure for admission to the undergraduate program in Engineering, which is based on the marks obtained in Physics, Chemistry and Mathematics subjects in the Maharashtra Common Entrance Test conducted by the Directorate of Technical Education headquartered at Mumbai or its equivalent.

The competition for admission is extremely tough and is restricted to the top 0.5% of the candidates appearing for the above said examination (10+2 pattern). Students who are able to seek admission to the Bachelor's Engineering Degree program in the Savitribai Phule Pune University after school education are considered to be amongst the high profile community of students.

Rules for award of B.E. Degree under the Faculty of Engineering in Savitribai Phule Pune University.

Bachelor's Degree program in Engineering is a four-year program. A candidate, to qualify for the award of Degree, is required to successfully complete eight semesters.

To qualify in each semester's examination a candidate must secure minimum 40% marks in each head of passing, as prescribed. Assessment for each semester is based on:

- I. Theory.
- II. Practical.
- III. Oral.
- IV. Term work.
- V. A Live-working Project (Final Semester only).

Grading System

The Savitribai Phule Pune University does not follow the Grade Point Average (GPA) system, but employs a quantitative grading system to evaluate the performance of a student. The overall percentage of marks obtained by a student for the whole year is graded as below:

Marks (%)	<u>Class</u>
40 - 50	Pass Class
50 - 55	Second Class
55 - 60	Higher Second Class
60 - 66	First Class
Above 66%	First Class with Distinction

Notes:

- 1. All subjects included in the curriculum are compulsory except in the final year, where a student chooses two electives. In the second, third and final year a student is required to give a seminar presentation on a topic of his engineering discipline and also develop and demonstrate a live working project, which is evaluated by an external examiner, who is normally a person from the industry.
- 2. Each semester is of 16 weeks and each lecture is of one-hour duration.
- 3. Theory, Term work, Oral and Practical examinations require minimum 40% marks for passing.
- 4. A student can be awarded a maximum of 15 marks to the total marks of the year as grace, either to clear a subject head or to obtain a higher class, as per Ordinance No. O.136 (B) and O.138 (A) of the Savitribai Phule Pune University.
- 5. It may be noted that the students of the Savitribai Phule Pune University face very strict assessment as the number of students securing a First Class and above are few as compared to the other universities in India. A First Class with Distinction earned from Pune University is considered to be an excellent performance.

Outward No.: MIT AOE/STUD/TRANSCRIPT//2016 About MIT Academy of Engineering (MIT AOE)

MIT Academy of Engineering (MIT AOE) is one of the premier engineering and technology institutes of the Savitribai Phule Pune University. The college is located in serene surroundings and thus, provides a pollution free environment to the student. This college is the branch extension of the Maharashtra Institute of Technology which is a highly acclaimed engineering college of the Savitribai Phule Pune University having Grade 'A' classification because of its excellent infrastructure. The Faculty of MIT AOE consists of Lecturers, Instructors, Assistant Professors and Professors with the qualifications as set by the University Grants Commission. Most of the teaching staff have varied teaching and industrial experience and have authored or co-authored textbooks on their subject of interest with reputed publishing houses in India. On the occasion of the 'University Foundation Day' on February 10, 2014, the Savitribai Phule Pune University felicitated the institute with the 'Best Professional Institute 2013-14' award.

Date: July 25th, 2015

The college is recognized by the All India Council for Technical Education and has the ISO 9001-2000 certification apart from recognition by the Directorate of Technical Education, Government of Maharashtra State. This engineering college has a speciality in the Computer Engineering discipline and undertakes educational research in this field. It has state of the art laboratories, a fully developed library, seminar halls and well-equipped workshops.

The college strives for all round development of students by encouraging sports and extracurricular activities along with academic excellence. Therefore, because of the excellent grooming given to the students, best recruiters visit this college for campus placement. The college has the reputation of producing bright and dedicated engineers and has an excellent placement record.

The medium of instruction and examination is English.

Abbreviations used in the Marks Statement.

L - Lecture P - Practical D - Drawing Т - Tutorial PP - Paper PR - Practical TW - Term work OR - Oral

Bachelor's degree course in Mechanical Engineering

Name of Candidate : Sanskar Bhattacharya

Examination Passed: July 2013

First Year (August 2012 to May 2013) Examination No. : E102800361 Perm. Reg. No. : 71310857G

Semester - I

Subject	Hou	rs/W	eek	Ma	ximum	Mark	s	Total	Ma	arks C	btaine	d	Total
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Engineering Mathematics I	4+1	-	ı	100	25	-	-	125	62	20	ı	ı	82
Engineering Physics	4	2	-	100	25	-	-	125	77	21	-	-	98
Fundamentals of Programming Language I	1	2	1	1	1	50	-	50	1	ı	28	ı	28
Basic Electrical Engineering	3	2	1	100	25	-	-	125	60	20	-	1	80
Basic Civil Engineering	3	2	1	100	25	-	-	125	79	20	-	1	99
Engineering Graphics I	3	-	2	100	-	-	-	100	69	-	-	-	69
Workshop Practice I	-	2	1	1	50	-	-	50	ı	38	1	ı	38
Total	19	10	2	500	150	50	-	700	347	147	-	-	494

$\underline{Semester-II}$

Subject	Hou	rs/W	eek	Ма	ximum	Mark	S	Total	Ma	arks O	btaine	d	Total
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Engineering Mathematics II	4	-	-	100	-	-	-	100	62	-		1	62
Engineering Chemistry	4	2	ı	100	25	1	-	125	78	17	ı	ı	95
Engineering Mechanics	4	2	-	100	25	-	-	125	86	18	-	-	104
Basic Electronics Engineering	3	2	-	100	25	-	-	125	58	19	-	-	77
Engineering Graphics II	-	-	2	-	50	-	-	50	-	39	-	-	39
Fundamentals of Programming Language II	1	2	-	-	-	50	-	50	-	-	25	-	25
Basic Mechanical Engineering	3	2	-	100	25	-	-	125	68	22	•	-	90
Total	19	10	2	500	200	-	-	650	352	140	-	-	492

Total for the year: 986/1400 Percentage: 70.43% Result: First Class with Distinction

Bachelor's degree course in Mechanical Engineering

Name of Candidate : Sanskar Bhattacharya

Examination Passed: July 2014

Second Year (June 2013 to June 2014) Examination No. : S120280879 Perm. Reg. No. : 71310857G

Semester - III

	Ho	urs/W	eek	M	laximu	m Mark	(S	Total	Ma	arks Ol	otaine	d	Total
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Engineering Mathematics III	4+1	-	-	100	25	-	-	125	65	21	-	-	86
Manufacturing Process- I	3		1	100	-	1	-	100	63	-	-	-	63
Computer Aided Machine Drawing	1	2	1	-	-	50	-	50	-	-	35	-	35
Thermodynamics	4	2	-	100	-	-	50	150	62	-	-	44	106
Material Science	3+1	-	-	100	25	-	-	125	73	16	-	-	89
Fluid Mechanics	3	2	-	100	-	-	50	150	45	-	-	21	66
Workshop Practice II	-	2	-	-	25	-	-	25	-	20	-	-	20
Soft Skills	-	2	-		25	-	-	25	-	22	-	-	22
Total	20	10	-	500	100	50	100	750	308	79	35	65	487

$\underline{Semester-IV}$

Subject	Ho	urs/W	eek	M	laximu	m Mark	(S	Total	Ma	arks O	btaine	d	Total
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Theory of Machines I	4	2	ı	100	25	ı	-	125	51	23	-	-	74
Engineering Metallurgy	3	2	-	100	-	-	50	150	58	-	-	40	98
Applied Thermodynamics	4	2	-	100	25	-	50	175	64	22	-	43	129
Strength of Materials	3	2	-	100	-	-	50	150	60	-	-	44	104
Electronics and Electrical Engineering	4	2	-	100	25	1	-	125	56	19	-	-	75
Machine Shop I	ı	2	ı	-	25	ı	-	25	ı	23	-	-	23
Total	20	10	-	500	100	-	150	750	289	87	-	127	503

Total for the year: 990/1500 Percentage: 66% Result: First Class with Distinction

Bachelor's degree course in Mechanical Engineering

Name of Candidate : Sanskar Bhattacharya

Examination Passed: July 2015

Third Year (June 2014 to June 2015) Examination No. : T120280888 Perm. Reg. No. : 71310857G

$\underline{Semester-V}$

	Ho	urs/W	eek	M	laximu	m Mari	KS	Total	Ma	Total			
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Design of Machine Elements - I	4	2	-	100	25	-	-	125	53	22	-	-	75
Heat Transfer	4	2	-	100	-	50	-	150	56	-	28	-	84
Theory of Machines - II	4	2	-	100	-	-	50	150	41	-	-	39	80
Metrology and Quality Control	3	2	-	100	-	-	50	150	51	-	-	35	86
Hydraulics and Pneumatics	3	2	1	100	25	-	-	125	62	20	-	1	82
Skill Development	-	2	-	-	50	-	-	50	-	38	-	-	38
Total	20	10	-	500	100	50	100	750	263	42	28	112	445

$\underline{Semester-VI}$

	Но	urs/W	eek	M	laximu	m Mark	(S	Total	Ma	arks Ol	otaine	d	Total
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Numerical Methods and Optimization	4	2	-	100	-	50	-	150	62	-	36	-	98
Design of Machine Elements - II	4	2	-	100	25	-	50	175	52	20	-	40	112
Turbo Machines	4	2	-	100	25	-	-	125	53	24	-	-	77
Mechatronics	3	2	-	100	25	-	-	125	68	17	-	-	85
Manufacturing Process - II	3	-	-	100	-	-	-	100	63	-	-	-	63
Machine Shop - II	-	2	-	-	25	-	-	25	-	19	-	-	19
Seminar	-	2	-		-	-	50	50	-	-	-	40	40
Total	20	10	-	500	100	50	100	750	298	80	36	80	494

Total for the year: 939/1500 Percentage: 62.6% Result: First Class

Bachelor's degree course in Mechanical Engineering

Name of Candidate : Sanskar Bhattacharya

Examination Passed: July 2016

Fourth Year (June 2015 to June 2016) Examination No. : B120280893 Perm. Reg. No. : 71310857G

Semester - VII

	Hou	rs/Wee	k	M	aximu	m Marl	KS	Total	Ма	arks O	btaine	ed	Total
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Refrigeration and Air Conditioning	3	2	-	100	25	1	50	125	48	21	-	38	107
CAD/CAM Automation	3	2	-	100	-	50	-	150	62	-	40	-	102
Dynamics of Machinery	4	2	-	100	25	-	50	150	54	21	-	40	115
Tribology	3	-	-	100	-	-	-	150	75	-	-	-	75
Product Design and Development	3	-	-	100	-	-	-	125	74	-	-	-	74
Project - I	2	-	-	-	50	-	-	50	-	44	-	-	44
Total	18	6	-	500	100	50	100	750	313	86	40	78	517

Semester - VIII

	Но	urs/W	eek	М	laximuı	m Marl	(S	Total	Ma	Total			
Subject	L+T	Р	D	PP	TW	PR	OR		PP	TW	PR	OR	
Power Plant Engineering	4	2	-	100	25	-	50	150	80	20	-	32	132
Mechanical System Design	4	2	1	100	-	ı	50	175	57	-	-	45	102
Industrial Engineering	4	-	-	100	-	-	-	125	55	-	-	-	55
Finite Element Analysis	4	2	-	100	25	1	-	125	68	23	-	ı	91
Project - II	6	1	1		150	ı	50	50	-	141	1	46	187
Total	22	6	-	500	200	-	150	750	260	184	-	123	567

Total for the year: 1084/1500 Percentage: 72.27% Result: First Class with Distinction

This is to certify that **Mr. Sanskar Bhattacharya** bears a good moral character and fine conduct. We assure you that he has potential for Academics and Research, and with his innovative bent of mind he will be an asset to your Institute while pursuing the Master's Program. We wish him all the best.

We hereby certify that the aforementioned information is true to the best of our knowledge.

Thank you

Yours Sincerely

Dr. Y. J. Bhalerao Director MIT Academy of Engineering (MIT AOE), Alandi (D) Pune-412105 India