

Dwarkadas J. Sanghvi College of Engineering

Plot No. U–15, J.V.P.D. Scheme, Bhaktivedanta Swami Marg, Vile Parle (W), Mumbai – 400056



Dear Prospective Students Welcome to the Department of Mechanical Engineering

Department of Mechanical Engineering at D.J.S.C.E.

- ✤ Intake B.E. 120
 M.E. 18
 Ph.D. 10
- This program is accredited by National Board of Accreditation for a period of three years with effect from the Academic Year 2018-19.
- ✤ We at mechanical engineering department with the help of management and principal are focusing on enabling the students to build their technical as well as professional skills to be successful in today's competitive era.

Vision of the Department

To create academic excellence by developing competent mechanical engineers, capable of facing global challenges, with human values and skills for research and sustainable development.

Mission of the Department

- To impart fundamental concepts of basic sciences and allied areas of engineering and technology.
- ✤ To enable students to develop into competent engineering professionals.
- ✤ To promote research activities.
- ✤ To promote interaction and involvement with professional bodies and industries
- ✤ To inculcate soft skills and professional ethics and mold students as socially responsible citizens.
- ✤ To promote exposure to green technology for sustainable growth and development.

Facilities & Resources

List of Laboratories:

- Fluid Mechanics and Hydraulic Machines
- Metrology and Quality Engineering
- CAMD Laboratory
- Mechanical Measurement and Control Laboratory
- Mechatronics Laboratory
- CAD/FEA Laboratory
- Materials Technology Laboratory
- Strength of Materials Laboratory
- Heat Transfer Laboratory
- Internal Combustion Engine Laboratory
- Vibration Laboratory
- Theory of Machines Laboratory

List of available software:-

- ANSYS
- AutoDesk Inventor
- Pro-E
- Festo FluidSIM

Departmental Library:-

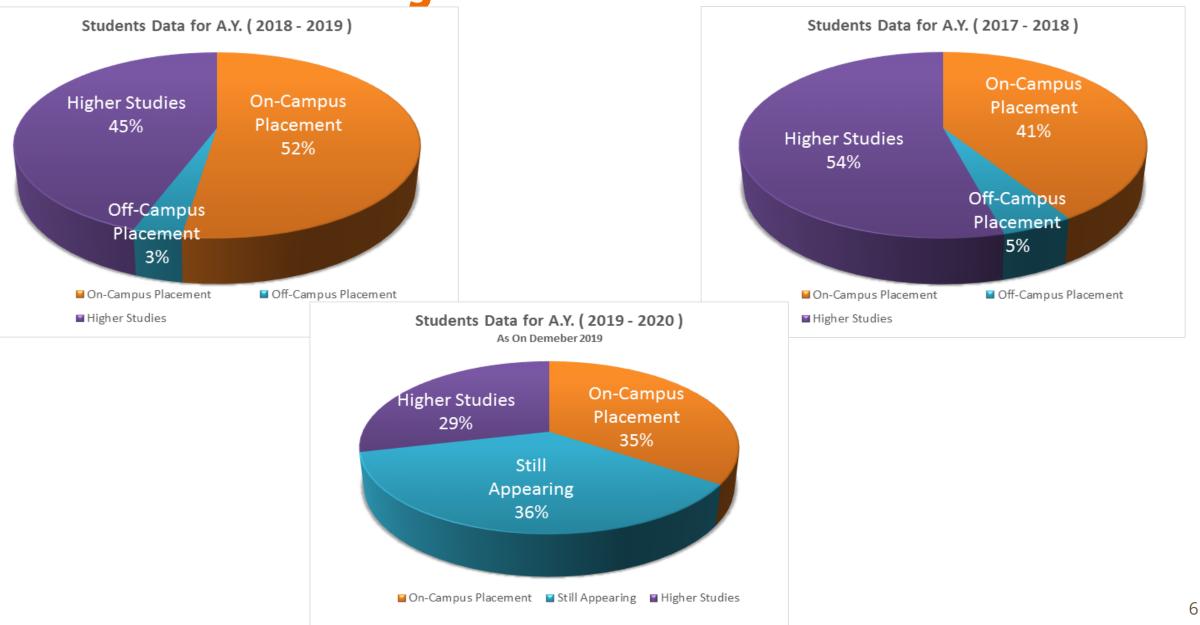
We have collection of 245 reference books written by National as well as International authors.

Industrial Visits

The Department conducts Industrial Visits every year at various industries from varied sectors. Some of the recent visits conducted in the academic year 2019-20 were at:



Placements & Higher Studies



Professional Bodies - Student Chapters

- The Mechanical Department itself has 4 bodies working under it.
- ISHRAE (Indian Society of Heating, Refrigeration & Air Conditioning Engineers)
- RAS (Robotics & Automation Society)
- ISME (Indian Society of Manufacturing Engineers)
- SAE (Society of Automotive Engineers)





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Indian Society of Heating, Refrigeration & Air Conditioning Engineers D.J. SANGHVI COLLEGIATE CLUB

About Us

- DJ-ISHRAE is a national level student chapter of D. J. Sanghvi college of engineering.
- Its aim is to support and promote interest in HVAC & Refrigeration system.



Recent Activities

- Participated at ISTL (ISHRAE Student Technical League) and competed in the Quarter Finals.
- Conducted a guest lecture on 'Energy Efficiency and Renewable Energy' by Dr. Roshini Eashow.
- Arranged for a practical based seminar on 'Solar panels and Renewable Energy' by Shrinivas Dighe.
- Conducted a seminar on 'HVAC technology products and environmental effects'
- Conducted a seminar on 'What as an engineer, I can do?' by Mr. Rajesh Gangar



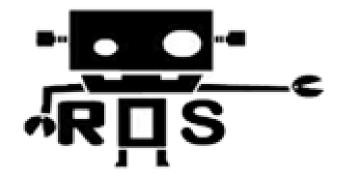




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Robotics and Automation Society D.J. SANGHVI COLLEGIATE CLUB

About Us

- Robotics and Automation Society (RAS) student chapter aims at developing the students in the fields of Robotics and Automation.
- Students from Mechanical Engineering, Electronics Engineering, Electronics and Telecommunication Engineering, Computer Engineering and Information Technology Engineering are a part of this chapter.



Recent Activities

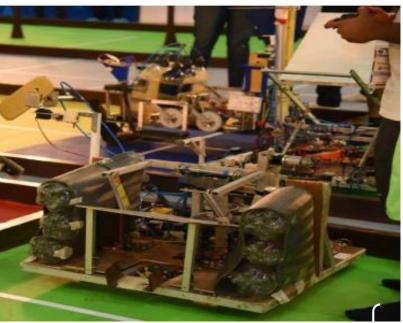
- Organised a workshop on 'AVR ATMEGA 32' by our Alumni Mr. Shreyas Shah
- Conducted a seminar on 'AI enabled Robots and Home Automation' by Mr. Ashish Patil.

DJS ROBOCON

- Team DJS ROBOCON is the official robotics team of our college.
- They participate in the Robocon International Competition which is organized by Asia-Pacific Broadcasting Union (ABU) every year.
- The team acquired an AIR 1 in 2019 for Stage I and hence qualified for the Stage II in the 2019 competition.



Robots manufactured in 2019

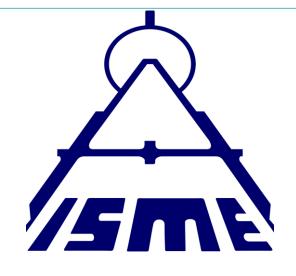




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Indian Society of Manufacturing Engineers D.J. SANGHVI COLLEGIATE CLUB

About Us

- The main objective of ISME (Indian Society Of Manufacturing Engineers) is to advance knowledge in the field of Manufacturing Engineering and Management and provide means and methods for applying such knowledge in practice and in education throughout the country.
- ISME is a professional society registered under the Societies Registration ACT XXI of 1860 of Maharashtra state.



The chapter is led by our Principal Dr. Hari Vasudevan

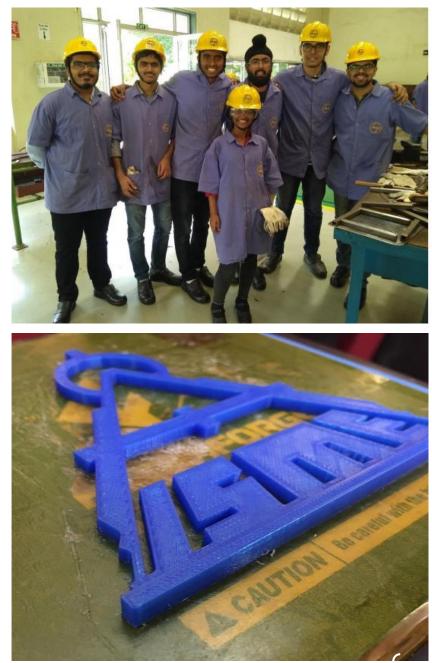
Recent Activities

DJ NIRMITI

Nirmiti is the technical fest organised by the committee every year. It is a 2 day event consisting of many competitions.

Other Activities

- They provided our students with 'Skill Enhancement Programme' at Industry.
- Conducted a seminar on 'Additive Manufacturing' by Prof. Dhirendra Mishra
- Organised Value Added Programme for our students on 'Ansys Workbench Software' & on 'CNC Machining Processes'.





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Society of Automotive Engineers D.J. SANGHVI COLLEGIATE CLUB

About Us

SAE International's mission is to advance mobility knowledge and solutions for the benefit of humanity. Principal emphasis is placed on transport industries such as automotive, aerospace, and commercial vehicles.



SAE-INDIA is a strategic alliance partner of SAE International and The SAE D. J. Sanghvi Collegiate Club comes under the Western Section of SAE-INDIA.

Currently there are 8 Automotive Teams under the Mechanical Department

Recent Activities

- Organised a workshop on 'Electric Vehicles' by Mr. Rakesh Sharma.
- Annually conducts an Aero Modelling Workshop for the students.
- A Value Added Program on 'MATLAB' mentored by Mr. Suhas Deshmukh.
- Conducted a lecture on 'Geometry of Mechanisms' by guest speaker Mr.Ujjwal Rane.
- Conducted a seminar on 'Jet Propulsion Engines'.
- An invited talk on 'Drive Through Tesla' was conducted by Mr. Viraj Bakshi.





The 8 Teams under SAE are...

DJS RACING

FORMULA STUDENT TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

DJS RACING



DJSR 01

Competition: Formula Student Germany 2014

Competition: Formula Student India 2016



DJSR 02



Competition: Formula Bharat 2017 Formula Student Germany 2017 Formula Bharat 2018

DJSR 03

Competition: Formula Student Austria 2018 Formula Bharat 2019

DJSR 04



DJS RACING





Formula Bharat 2019 Combustion Category: 2nd in Design Event, 3rd in Cost Event, 4th Overall & 3rd in Endurance Run

Formula Bharat 2019 Electric Category: 2nd in Cost Event & 4th Overall





DJSR 05

Formula Student Germany 2019: Awarded 'Never Give Up' award Formula Bharat 2020: 1st in Cost Event & 2nd in Skidpad



OFF-ROAD RACING TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING





Enduro Student India 2019

- Overall 3rd in India
- Winners Manoeuvrability
- Runners Up Business Plan
- Second Runners Up Sprint
- Overall 1st in Dynamic Events
- Overall 3rd in Static Events
- Overall 1st in Mumbai

BAJA SAE India 2019

- Winners Manoeuvrability
- Winners Innovation
- Overall 10th in Sales
- Overall 11th in Design
- Overall 1st in Mumbai









BAJA SAE International Arizona 2020

- Overall 3rd Worldwide
- Overall 4th in Design Event
- Overall 8th in Sales
- Overall 9th in Cost Event
- Overall 1st in Mumbai



BAJA SAE India 2020

- Overall 3rd in India
- Overall 16th in India
- Overall 6th in Manoeuvrability
- Overall 17th in BAJA SAE Virtual





AERO DESIGN TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING





First Prize for Design Report SAE Aero Design West 2017, Texas



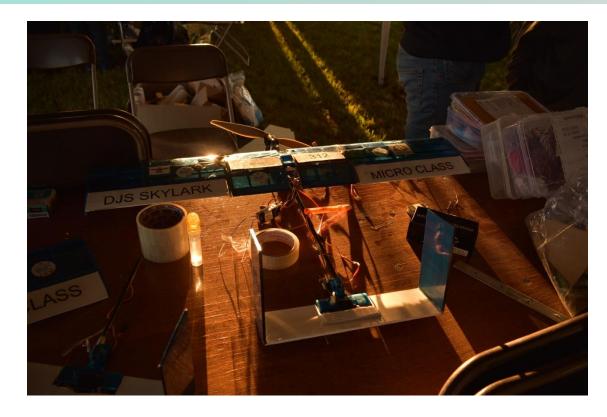
Second Prize for Micro Class Design Report, SAE Aero Design East 2019, Texas



Third Prize for Technical Presentation, SAE Aero Design East 2016, Texas







SAE AERO DESIGN 2020 MICRO CLASS:

3rd Overall Worldwide 2nd Mission Performance 3rd Technical Presentation



SAE AERO DESIGN 2020 REGULAR CLASS:

9th Technical Presentation 14th Design Report



KARTING TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING



ACHIEVEMENTS



DJSK 01

2016-17 Competitions:

Indian Karting Championship- Kolhapur Go-Kart Design Challenge-Coimbatore

DJSK 02

2017-18 Competitions:



Indian Karting Championship- Kolhapur Go-Kart Design Challenge-Coimbatore







ACHIEVEMENTS



DJSK 3.1 & 3.2

ASM International Exhibition, Vashi 2019

2nd place for innovation

Go-Kart Design Challenge 2019

2nd in Design 3rd in Cost 1st in Acceleration **Indian Karting Championship 2019** 1st in CAE & 2nd in Design Indian Karting Championship 2020

EV: 1st in Design Evaluation, 4th in Endurance & 4th overall

CV: 4th in Design Evaluation

Go-Kart Design Challenge 2020

EV: 3rd in Acceleration, 4th in Design & 9th Overall
CV: 1st in Design Event, 3rd in Acceleration,
3rd in skidpad, 5th in autocross & 9th overall



SOLAR VEHICLE TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING



ACHIEVEMENTS



INITIAL PROTOTYPE, 2016 COMPETITIVE MODEL, 2017

THE EFFICIENT 3 WHEEL DRIVE, 2018

OUR JOURNEY TO SUCCESS

HELIOS ACHIEVEMENTS





ESVC 2018:

1st in Acceleration Test
1st in Business Plan and Cost Report
1st*in Hill Climb
Runners Up in Endurance by completing maximum number of laps
Runners Up in Solar Performance Test
Runners up in Design and Innovation
Runners up in People's Choice Award
3rd Rank in Crosspad
1st rank in ESVC 2018 Adventure class vehicles

IASC 2018:

1st in Endurance
1st in Design
Runners Up in Solar
Performance
Runners Up in Innovations
Runners Up in Business Plan
3rd Rank in Acceleration
3rd in Autocross

Electric-Solar Vehicle Championship 2019 2nd in Business Plan & 2nd in Acceleration

National Solar Vehicle Challenge (NSVC 2020)

1st in Pre-Virtuals, 2nd in Business Plan & 2nd in Acceleration

DRONE TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

DENI

ACHIEVEMENTS





TECHNOXIAN 2017 , DELHI *Overall 5th*

MET & HTS 2018 International Exhibition & Conference Overall 3rd in Innovation Pavilion





World Robotics Championship 2019, Delhi Overall 12th



E-BIKE TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

ACHIEVEMENTS



Asian E-Bike Challenge 2018-19

- ♦ Overall 7th Rank
- ✤ 3rd in Acceleration Test
- ✤ 4th in Skidpad
- ✤ Best Energising Team

Participated in the final university round of Avishkar Research Competition organized by Mumbai university with a working prototype of the Motorbike



ACHIEVEMENTS

ASIAN E-BIKE CHALLENGE 2020:

1st Overall Best Engineering Design Overall Static Event Winner Best Project Plan Best Startup Plan





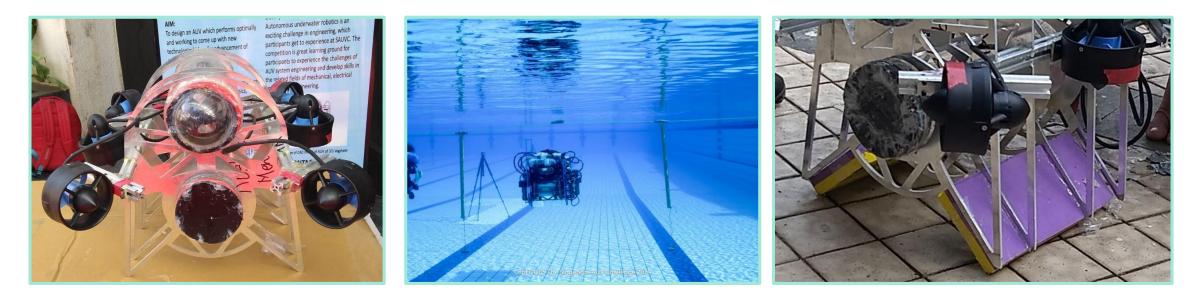
EBRC 5.0 2020: Overall Runners Up



AUTONOMOUS UNDERWATER VEHICLE TEAM OF DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING



- The team aimed to participate in the SAUVC (Singapore Autonomous Underwater Vehicle Competition) which was to be held in March 2020.
- ✤ It is organised annually in Singapore , with 75 teams of top universities participating.
- ✤ The team successfully manufactured and tested their vehicle.



Sports Achievements



Runners Up at St. Francis Tournament



Lawn Tennis Semi Finalist at KJSCE SKREAM



Overall Runner Up in Swimming Competition



Achieved 1st Rank in a total of 4 Table Tennis Competitions





Table Tennis Team

Alumni Feedback



Mihir Kansara Batch - 2015 - 2019

There comes a phase in our lives that directs our goals and shapes our personality for years to come. DJ Sanghvi was that phase for me. The department of Mechanical Engineering has so much to offer other than top class education. To all the students, either joining or pursuing at the moment, I'd just say this one

thing: Life is going to get tough in the coming years. These are the years to build the foundation to face difficulties in life later.

So be productive. Be smart.

Get on your toes, elevate the level, raise the bar and keep up the good work, by flying higher and going onwards and upwards.

As I reflect upon my academic career, I look back to my time at DJ Mech with extremely fond memories.

The undergraduate degree in Mechanical Engineering from DJSCE served as an excellent platform for me to build on and pursue my higher education, and in the case of some of my colleagues, to kick-start their respective professional careers. In addition to the academic coursework, the encouragement and constant support from the department for the students to pursue extracurricular activities was quite extraordinary.

DJSCE has proven to be a great first step that I continue to build on to pursue a career as a mechanical engineer.



Janav Udani Batch - 2011 - 2015

Recruiter Feedback



Mr. Hari Menon, TAG Mumbai, TCS Thane We value our partnership with DJ Sanghvi and the support extended to each other over the years.TCS has been visiting the institute for many years and the quality of students hired has been constantly scaling up. The students have always impressed us with their enthusiasm, communication skills and professional demeanor. We have many students from the institute doing great work in TCS across locations. I must mention that the vision, hard work and dedication of the teaching staff and management has been instrumental in shaping the overall development of the students. This foresight has helped the institute make a mark as one of the best institutes in the region.We are extremely happy to be partnering with DJ Sanghvi. Wishing you all the best.

DJSCE as an institute has maintained meaningful interactive notes with industry on various fronts with a view to enrich the content delivery pertaining to academic matters so as to make technical education more effective. Graduates from DJSCE are knowledgeable, confident and competent to tackle complex engineering situations and will be undoubtedly one of our preferred choices for training and/or placement.



Thank You. For More Details:-

You can visit the Department of Mechanical Engineering on the 4th Floor Or Visit Our Website- <u>djsce.ac.in</u>

For Any Queries :-

Please Contact: Dr. K. N. Vijaya Kumar - Professor & Head of the Dept. of Mechanical Engineering Cell :- 98693 63683 / 79771 47796 Email: vijaykumar.kottur@djsce.ac.in