Key Distinctive features of APCOER:

Sr. No.	Distinctive Feature	Link to More information
1.	Quality Education To Diverse Students	Website Link
2.	Innovative Projects of APCOER	<u>Website</u> Link
3.	Startups Under APCOER	Website Link
4.	Foreign Language Skill development.	<u>Website</u> Link
5.	Awards under ISTE student Chapter	<u>Website</u> Link
6.	DST PRAYAS Shala	<u>Website</u> Link

The ABMSP's APCOER, Pune distinguishes itself from peer institutions by offering an affordable, highly personalized, student-centered quality technical education to diverse students. It was established in 2012 and comprises students, faculty, and staff who possess differing attributes based on race, ethnicity, gender, sexual orientation, disability status, age, religion, and other characteristics.

Diversity grounds intellectual pursuits and provides us with opportunities for discovery and ways to integrate all individuals and groups into the larger community, respecting and valuing their uniqueness while simultaneously advancing the Institute's historical tradition. APCOER was named after keeping in mind the research outcomes and the broader mission of its visionaries. The prime objective of the institute is to promote students and staff to publish their work in reputed Conferences, Symposiums, and International Journals. The faculty members who are full-time engaged in teaching are also urged to come up with their findings, and experiments and show their competencies and research potential to encouragement in research domains to other faculties and students as well. The UG and PG Students are assigned a guide for their project ideas and various domains. Students are encouraged to file patents and as a result, several patents are published by students. Along with students, every faculty member publishes their research findings in various Journals and Conferences throughout the Year.

Agriculture projects like AgroBot, AgroSense, AgroMON, AgroZone, AgroData, AgroNet, and AgroAIML are in progress where students and faculties are working in different aspects of the projects listed. Smart Poly House is set up on the premises of the institute for research purposes. A drone project is ongoing for pesticide spraying in Agriculture Applications.

The civil environmental engineering department has developed the project for mercury recovery from burnt fluorescent tubes and lamps. Individual faculty have received BCUD



research grants of Rs. 3,00,000.00, Rs. 1,15,000.00, and Rs. 2.40,000.00 from Savitribai Phule Pune University (SPPU) for a two-year project (2019-2021).

Institute has started the Technology Business Incubator (TBI) Center to inculcate entrepreneurship and the creation of enterprises on knowledge-based innovation. The main objective of the technology business incubators is to produce successful business ventures that create jobs and wealth in the region.

Eight new startups have been registered where the faculty of APCOER are founders along with students. Students and staff have participated in the Rotary Club Skill & Start-up Expo in April 2023.

Also in 2021-2022, PG Student of APCOER registered a startup as COPORR APEC PRIVATE LIMITED Company which is working on patentable technology to process and recover the value-added products from waste. COPORR APEC has two aspects first with social, from which we protect waste workers from hazards like mercury poisoning and injuries due to broken glass, creates job opportunities in the recycling sector, and second aspect environmental, which is helpful to the soil, prevents leaching of mercury from landfill into soil and groundwater, reduces dumping into rivers, thereby protecting aquatic & human life.

Considering the requirement of bilingual engineers in various Japanese and German companies. All the students and faculties are studying German, Japanese, and French language in daily timetable hours as an additional skill development.

APCOER has a student chapter of the Indian Society for Technical Education (ISTE) The objective of ISTE is to encourage and support our staff and students to organize and participate in various conferences, symposiums, and training, whereupon students and staff interact with each other which brings development and betterment in technical education. Awards received:

- Best Teacher, Best Research, and Best Innovation in the year 2022-2023
- Best chapter chairman Award in the 51st ISTE National Annual Faculty Convention in 2021-2022

NIDHI PRAYAS Center, 'Prayas Shala'- a Fabrication Lab has been set up at ABMSP's Anantrao Pawar College of Engineering and Research as host institute, to realize the product idea into a prototype. The facility has all the necessary machines, equipment to manufacture, experiment and finalize the prototype. Apart from the financial support in form of prototyping grant-in-aid, PRAYASEEs - candidates selected under this programme receives the following Benefits powered by Science and Technology Park team members and their connects:

- Guidance from experienced, innovative and highly successful entrepreneurs on the business concept, strategy or venture and insight into specific industries or markets.
- Best practices for starting a business and broadening the professional network. Co-working space for developing the idea into a marketable product.



Summary proving distinctiveness of APCOER:

Institute has established an Innovation Club of highly experienced Academicians and Industrialists. This innovation ecosystem transfers new ideas of students/faculties into reality through facility and financial support.

Faculties have applied for research grants to various agencies like DST, SERB, SPPU, RGS & TC, STP-Nidhi Prayas and AICTE. SPPU, SERB, STP-Nidhi Prayas sanctioned grants for various research projects of the institute.

Our faculties and students are working on the EV platform which is needed today. Institutes have developed certain models for technology transfer like EV bicycles.

Our innovation ecosystem provides access to resources required for startups and flow of information for stakeholders. Institute has an operational Incubation Centre APCOER TBI with eight active startups. Major focus of innovation is in the Agriculture sector. Awareness given to students for developing small ideas/projects which cater to the needs of farming technologies in India.

Following are some of the startups registered under APCOER TBI:

- Bricks of tamarind (different sizes)
- Asra- Stick with seat foldable
- Web Viva- Software company
- Sharadchandra Tech Venture- Software company
- Cover Blocks
- Mini Vita
- APCOER Balaji Phenyl
- Smart Helmet

A project for mercury recovery from burnt fluorescent tubes and lamps which includes valuable material such as ceramic, metal and glass. This startup has got many prizes at National & State Level.

Institute has developed, Institute Innovation Cell (IIC), faculties and students filed fifteen patents.

