

Academy of Scientific & Innovative Research

Set up by an Act of Parliament, An Institute of National Importance



Ph.D (Engineering)

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WHY STUDY AT AcSIR?

The objective of AcSIR is pursuit of excellence as well as doing something relevant. We promote the culture of being singularly dynamic and innovative. The Academy was established by a Resolution of the Parliament in 2010 and received recognition as an "Institution of National Importance" by the Academy of Scientific and Innovative Research (AcSIR) Act 2011. The Academy aims to maximize the number of qualified researchers and professionals of impeccable quality in the domain of science and engineering; and to equip them with the skills to innovate and conduct seamless interdisciplinary research.

FACULTY

There are about 2000 Scientists of CSIR across about 40 national institutes who are Faculty members of AcSIR. In addition, there are Eminent Academy Professors, Distinguished Emeritus Professors and Adjunct Faculty members from reputed institutions and industry who contribute professionally to AcSIR.

ABOUT PROGRAMS

The programs equip students to undertake interdisciplinary research by providing a broad-based practical training in the best in the class national laboratories of CSIR. The Programs are structured around academic coursework (as per program requirement) and mandatory courses viz. one Project Proposal & one Review Article writing; and Societal Program; and research in frontier areas of Science, Technology and Engineering leading to Ph.D degree.

ELIGIBILITY CRITERIA FOR ADMISSION

1. Ph.D in Engineering

(i) A Master's degree in Engineering or Technology following a four-year engineering/technology or 4/5 year science degree; or an integrated minimum-5-year M Tech degree; or equivalent.

AND

- (ii) At least one of the following
 - (a) Awarded a national-level fellowship (such as NET JRF) tenable at CSIR institutes
 - (b) Meeting all the conditions required for eligibility for the CSIR-SRF
 - (c) Meeting all the conditions for award of the INSPIRE fellowship (typically awarded to students ranked first in the University)
 - (d) Meeting all the conditions stipulated by AcSIR for Project Assistants to register for a PhD
 - (e) Meeting all the conditions stipulated by AcSIR for industry-sponsored* students.

2. Integrated Dual-Degree PhD (IDDP) Program

(i) A 4-year undergraduate degree in Engineering or Science (such as BE/BTech/BS), or a five year degree in Science (such as MSc), or equivalent.

AND

- (ii) At least one of the following
 - (a) Awarded a national-level fellowship (such as NET JRF) tenable at CSIR institutes
 - (b) Meeting all the conditions required for eligibility for the CSIR-GATE-JRF
 - (c) Meeting all the conditions for award of the INSPIRE fellowship (typically awarded to students ranked first in the University)
 - (d) Meeting all the conditions stipulated by AcSIR for Project Assistants to register for a PhD
 - (e) Meeting all the conditions stipulated by AcSIR for industry-sponsored* students.
- * with endorsement from Industry, Academic or Research Institutes for required academic leave and financial support during program.

These are only minimum quality yardsticks of eligibility for consideration for admission and bear no relationship with financial assistance or scholarship. Any stipend, scholarship or financial source for study would be the sole responsibility of the student. AcSIR itself does not provide any such scholarship or have any rule in these matters.



Candidates whose final results are awaited, but who are otherwise eligible as per the screening criteria, can also apply. If selected, they will be provisionally admitted to the program. Their continuation in the program will be subject to securing required percentage/ equivalent grade (depending on the cut-off marks for screening for the specific program) and submission of marks-sheet of their final result at the time of joining the program.

ADMISSION PROCESS

The candidates can exercise a maximum of three preferences for CSIR Labs (which are AcSIR centres). Candidates will be screened based on their preferences given. However, it does not give any right to the candidate to be offered admission as per his/her preference/ choice, as the selection is purely based on merit/ performance and/ or available vacancies. Please visit AcSIR website (http://acsir.res.in) for details of on-line application form submission and additional details.

Short-listed candidates for the program will be intimated electronically and they will be required to appear for interview for selection at the designated centers on the dates announced. Details of date of interview at different laboratories/ centers will be posted on the AcSIR website (http://acsir.res.in).

In addition to their academic performance and/ or depending on the vacancies, final selection will be based on performance of the candidate in the interview.

Reservation shall be applicable as per GoI rules.

ACADEMIC REQUIREMENTS FOR PROGRAM COMPLETION

SI. No.	Program	Modules of Program						Period of			
		Study & Credits						Minimum residency in	completion (in years)		
		Course work	Project Proposal	Research Review Report	Societal Program	Total	Doctoral	Research	campus	Min.	Max.
1.	Ph.D (Engg)	8	2	2	4	16	Completion of thesis		Full-time at campus	3	6
2.	Integrated Dual-Degree PhD (IDDP)	32	2	2	4	60	Research Proposal: 20	Completion of thesis	Full-time at campus	3	3

PROGRAM FEE STRUCTURE

Candidature	Semester Fee (INR)	Thesis Submission Fee (INR)
Regular	6,000	5,000
Sponsored	12,000	25,000

- Hostel Boarding and Lodging Charges shall be as applicable.
- The above tuition fee is applicable to Foreign Nationals also.

EVALUATION PROCEDURE AND GRADING SCHEME

Letter grades will be awarded for each course reflecting the student's proficiency and instructor's expectation. The grades and their description along with their equivalent numerical values, where applicable, are as follows:

Letter Grade	Performance	Numerical Value
A+	Outstanding	10
Α	Excellent	9
B+	Very Good	8
В	Good	7
C+	Fair	6
С	Poor	4



Letter Grade	Performance	Numerical Value
F	Very Poor	2
1	Incomplete*	0
S	Satisfactory (for Au and Thesis)	udit Courses, Level-4 PhD Courses
X	Unsatisfactory (for Courses and Thesis	Audit Courses, Level-4 PhD

^{* &}quot;I" grade shall be given to students who have (i) Not Attended Classes; and/or (ii) Not been evaluated. This implies repeating the full course.

Performance of the student will be evaluated by two indices, Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA). These will be calculated as follows:

- > SGPA={Sum of (Course credit X Numerical value of course grade)} / Total course credits earned in the semester
- CGPA = Cumulative points scored in all passed courses / Cumulative credits earned

A student needs to have a SGPA of over 6.0 in each semester and a CGPA of over 6.5 from second semester onward for continuation. Minimum grade point to be earned to pass any subject is 6.0. For distinction, the student need to score CGPA = 8.0 or above.

Award of M.Tech for IDDP students:

- Award of Final Degrees: Two final degrees (M.Tech and Ph.D) will be awarded together on completion of requirements for the end degree (i.e., Ph.D) of the IDDP.
- Award of Provisional M.Tech Degree under the IDDP program: Provisional M.Tech degree may be awarded (before completion of fulfillment of requirement for award of Ph.D degree) only under the following circumstances:
 - After clearance of Open Colloquium (eligibility criteria being at least 3 years of enrollment in the IDDP), conversion to Part-time PhD program may also be requested as per existing rules. However, thesis is to be submitted within the stipulated time limit after Open Colloquium as per AcSIR rules.
 - On request, after completion of 6 semesters or more, provided Comprehensive
 Examination, is successfully cleared as per AcSIR rules. Student can also request for
 conversion of program to part-time IDDP with due justification and plan of completion
 of doctoral research program as per AcSIR rules.

Exit from the IDDP program with M.Tech degree would not be allowed. In case of discontinuation from the program, the student would be issued grade cards for the completed semesters only for their academic or genuine professional use, if any.



AcSIR Campuses

Research Labs	Name of the CSIR Lab	Website (http://)
CSIR-4PI	CSIR Fourth Paradigm Institute, Bangalore	www.csir4pi.in
CSIR-AMPRI	Advanced Materials and Processes Research Institute, Bhopal	www.ampri.res.in
CSIR-CBRI	Central Building Research Institute, Roorkee	www.cbri.org.in
CSIR-CCMB	Centre for Cellular & Molecular Biology, Hyderabad	www.ccmb.res.in
CSIR-CDRI	Central Drug Research Institute, Lucknow	www.cdriindia.org
CSIR-CECRI	Central Electrochemical Research Institute, Karaikudi	www.cecri.res.in
CSIR-CEERI	Central Electronics Engineering Research Institute, Pilani	www.ceeri.res.in
CSIR-CFTRI	Central Food Technological Research Institute, Mysore	www.cftri.com
CSIR-CGCRI	Central Glass & Ceramic Research Institute, Kolkata	www.cgcri.res.in
CSIR-CIMAP	Central Institute of Medicinal & Aromatic Plants, Lucknow	www.cimap.res.in
CSIR-CIMFR	Central Institute of Mining and Fuel Research, Dhanbad	www.cimfr.nic.in
CSIR-CLRI	Central Leather Research Institute, Chennai	www.clri.nic.in
CSIR-CMERI	Central Mechanical Engineering Research Institute, Durgapur	www.cmeri.res.in
CSIR-CRRI	Central Road Research Institute, New Delhi	www.crridom.gov.in
CSIR-CSIO	Central Scientific Instruments Organisation, Chandigarh	www.csio.res.in
CSIR-CSMCRI	Central Salt & Marine Chemicals Research Institute, Bhavnagar	www.csmcri.org
CSIR-IGIB	Institute of Genomics and Integrative Biology, New Delhi	www.igib.res.in
CSIR-IHBT	Institute of Himalayan Bioresource Technology, Palampur	www.ihbt.res.in
CSIR-IICB	Indian Institute of Chemical Biology, Kolkata	www.iicb.res.in
CSIR-IICT	Indian Institute of Chemical Technology, Hyderabad	www.iictindia.org
CSIR-IIIM	Indian Institute of Integrative Medicine, Jammu	www.iiim.res.in
CSIR-IIP	Indian Institute of Petroleum, Dehradun	www.iip.res.in
CSIR-IITR	Indian Institute of Toxicology Research, Lucknow	www.iitrindia.org
CSIR-IMMT	Institute of Minerals and Materials Technology, Bhubaneswar	www.immt.res.in
CSIR-IMT	Institute of Microbial Technology, Chandigarh	www.imtech.res.in
CSIR-NAL	National Aerospace Laboratories, Bangalore	www.nal.res.in
CSIR-NBRI	National Botanical Research Institute, Lucknow	www.nbri.res.in
CSIR-NCL	National Chemical Laboratory, Pune	www.ncl-india.org
CSIR-NEERI	National Environmental Engineering Research Institute, Nagpur	www.neeri.res.in
CSIR-NEIST	North East Institute of Science & Technology, Jorhat	www.neist.res.in
CSIR-NGRI	National Geophysical Research Institute, Hyderabad	www.ngri.org.in
CSIR-NIIST	National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram	www.niist.res.in
CSIR-NIO	National Institute of Oceanography, Goa	www.nio.org
CSIR-NISTADS	National Institute of Science, Technology and Development Studies, New Delhi	www.nistads.res.in
CSIR-NML	National Metallurgical Laboratory, Jamshedpur	www.nmlindia.org
CSIR-NPL	National Physical Laboratory, New Delhi	www.nplindia.org
CSIR-SERC	Structural Engineering Research Centre, Chennai	www.serc.res.in
CSIR-URDIP	Unit for Research & Development of Information Products, Pune	www.urdip.res.in

For seats availability or not in each CSIR Lab for the AcSIR Admission Semester Aug 2018, please visit admission portal of AcSIR (https://bit.ly/2K1daJf)

USEFUL LINKS FOR FURTHER INFORMATION

Online applications and further information about studying at AcSIR

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Visit us: http://acsir.res.in



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