

### **Government of India DEPARTMENT OF ATOMIC ENERGY** (DAE)

**Bhabha Atomic Research Centre** (BARC) Training Schools





## Invite **Engineering Graduates and Science Postgraduates**

- · Who would relish challenges in frontier areas of Science and Technology,
- Who would like to be part of an expanding program of Nuclear Reactors, Accelerators and Fuel Cycle Technologies,
- Who would enjoy pursuing innovative research in Engineering, Physics, Chemistry,

#### to apply for recruitment as

Scientific Officers (Group-A post of Government of India) through its academic programs OCES - 2022 and DGFS - 2022

#### TRAINING SCHEMES AND EMPLOYMENT DESCRIPTION

1. One Year Orientation Course for Engineering Graduates and Science Postgraduates for the year 2022-2023 (OCES-2022) conducted at the BARC Training Schools. Table-1 lists Eligible Disciplines. Table-2 lists the Eligible Disciplines and orientation of the Training Program at each of the Training Schools. A Trainee Scientific Officer (TSO), who scores a minimum of 50% aggregate marks on completion of the Training Program, is declared to have completed the course successfully. Successful TSOs will be posted as Scientific Officers in one of the following DAE units:

a) Bhabha Atomic Research Centre (BARC), Mumbai\*, b) Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, c) Raja Ramanna Centre for Advanced Technology (RRCAT), Indore, d) Variable Energy Cyclotron Centre (VECC), Kolkata, e) Heavy Water Board (HWB), Mumbai\*, f) Nuclear Fuel Complex (NFC), Hyderabad\*, g) Board of Radiation and Isotope Technology (BRIT), Mumbai\*, h) Nuclear Power Corporation of India Ltd (NPCIL), Mumbai\*, i) Bharatiya Nabhikiya Vidyut Nigam Ltd (BHAVINI), Kalpakkam\*, j) Atomic Minerals Directorate for Exploration & Research (AMD), Hyderabad\*, k) Uranium Corporation of India Ltd (UCIL), Jaduguda\*, I) Directorate of Construction, Services and Estate Management (DCS&EM), Mumbai\*

\*These units have their Head Office at the indicated locations. Placement can be at the Head Office or at other facilities of these units located in different parts of India.

Allocation of a successful OCES TSO to a DAE unit is carried out based on the needs of DAE's programs and the TSO's performance in the OCES program. DAE reserves the right to place TSOs in any of its other units also or the Atomic Energy Regulatory Board (AERB).

Performance above a specified threshold in course work at the Training School will entitle TSOs to a Post-Graduate Diploma or could earn them credits towards M.Tech./ Ph.D. programs of Homi Bhabha National Institute (HBNI), a Deemed to be University.

2. Two-Year DAE Graduate Fellowship Scheme for Engineering Graduates and Physics Postgraduates for the years 2022-2024 (DGFS-2022). Under this scheme, Engineering Graduates and Physics Postgraduates who have excelled in the Selection Interviews for the BARC Training Schools' program and who have independently secured admission for M.Tech./M.Chem.Engg. in select Institutes and specializations as listed in Table-3, are paid stipend and tuition fee to pursue a M.Tech./M.Chem.Engg. degree while retaining their employment in DAE. After successful completion of one-year course work at the Institute, Fellows undertake project work, which is assigned by DAE and supervised jointly by a DAE guide and the Institute guide. On successful completion of M.Tech./M. Chem. Engg., they are posted as Scientific Officers in DAE. On joining, they are required to first undertake a four-month Orientation Course for DGFS Fellows (OCDF) at the BARC Training School, Mumbai. The DGFS Fellows are enrolled and posted in one of the following units of DAE: a) BARC, Mumbai\*\*, b) IGCAR, Kalpakkam. Allocation of a DGFS Fellow to a DAE unit is done at the beginning of the M.Tech./M.Chem.Engg.

\*\*Placement can be at any of the BARC facilities located in different parts of India. Selected candidates are required to execute an agreement and a personal Indemnity Bond to serve DAE for at least three years after completion of Training. Indemnity Bond is for ₹ 6,78,000 for OCES TSOs and ₹ 13,58,000 for DGFS Fellows #. No third party surety is required.

#The Bond Amount for DGFS Fellows pursuing M.Tech./M.Chem.Engg. at certain DGFS Institutes may be different, depending on the tuition fee at the concerned Institute. During Training: (i) Stipend and Allowances: OCES TSOs and DGFS Fellows are paid a stipend of ₹ 55,000 per month during the period of their Training. Additionally, they are paid a one-time book allowance of ₹ 18,000. (ii) DGFS Fellows are reimbursed the tuition fee for M.Tech. / M.Chem.Engg. and are additionally paid a one-time Contingency Grant of ₹ 25,000 to meet M.Tech. / M.Chem.Engg. project related expenses.(iii) Boarding and Lodging in DAE or DGFS Institute Hostel respectively, during Training, is

### **GRADE AND PAY SCALE ON APPOINTMENT:**

Appointment in all the units shall be as a Scientific Officer(C) in the Level 10 - ₹ 56,100 of 7th CPC Pay Matrix. Appointment will be at the beginning of the pay scale with OCES TSOs getting two or three increments depending on their performance during the OCES program and the DGFS Fellows getting three or four increments\*\*\*depending on their performance in M.Tech./ M.Chem.Engg. and the four-month OCDF. Total Monthly Emoluments (with three increments) at the time of joining including Dearness Allowance, House Rent Allowance and Transport Allowance at the present Mumbai rate will be approximately ₹ 1,05,000. In addition, other Allowances such as Leave Travel Concession by air, every year up to first eight years (subject to conditions) and once in two years thereafter, Children's Education Allowance and an annual Professional Update Allowance are also payable. A comprehensive Contributory Health Service Scheme for employees and their dependent family members is also available.

\*\*\*DGFS Candidates whose performance in the M.Tech./M.Chem.Engg. and OCDF programs is below a specified threshold will get zero increments. **SELECTION PROCESS** 

Selection to OCES/DGFS-2022 is a two-step process: Screening to short-list candidates followed by Selection Interviews of the short-listed candidates. There is a separate selection process for each of the disciplines listed in Table-1 except for FRT-M (code 30), FRT-E (code 31), QA&QC (code 32) and RSES (code 44).

OCES-2022: One-Year Orientation Course for Engineering Graduates & Science Postgraduates starting in October, 2022 will be conducted at BARC Training Schools situated at: BARC, Mumbai; IGCAR, Kalpakkam; NFC, Hyderabad; RRCAT, Indore; AMD, Hyderabad.

DGFS-2022: Two-Year DAE Graduate Fellowship Scheme for Engineering Graduates and Physics Postgraduates for joining M.Tech. / M.Chem.Engg. in select specializations starting in July 2022 at: Indian Institute of Technology(IIT)-Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras, Roorkee and BHU-Varanasi; National Institute of Technology (NIT) - Rourkela; Institute of Chemical Technology (ICT)

On successful completion of the OCES or DGFS programs, Trainee Scientific Officers (TSOs) and DGFS Fellows will be appointed as Scientific Officers in one of the DAE units or Atomic Energy Regulatory Board with attractive career progression opportunities up to the highest echelons.

Performance of OCES TSOs above a certain threshold at the BARC Training School will entitle them to a Post-Graduate Diploma of Homi Bhabha National Institute (HBNI), a Deemed to be University and could also earn them credits towards M.Tech. / Ph.D. programs of HBNI. DGFS Fellows will get opportunities some time in their career for pursuing Ph.D. through HBNI after joining DAE.

DAE strives to have a workforce which reflects gender balance and women candidates are encouraged to apply.

FRT-M is an additional Training Scheme option available to applicants belonging to Mechanical Engineering or Chemical Engineering (codes 21 and 22). FRT-E is an additional Training Scheme option available to applicants belonging to Electrical Engineering or Electronics Engineering (codes 24 and 25). QA&QC is an additional Training Scheme option available to applicants belonging to Mechanical Engineering or Metallurgical Engineering (codes 21 and 23). RSES is an additional Training Scheme option to applicants belonging to Nuclear Engineering, Physics and Chemistry disciplines (codes 29, 41 and 42). There is no separate Training Scheme called 'Nuclear Engineering' and selected candidates belonging to Nuclear Engineering (code 29) will be allotted RSES or Mechanical or Chemical as their Training Schemes.

Screening for Selection Interview is through two alternative channels:

(a) Online Screening Examination: It will be conducted in nine Engineering disciplines (codes 21-29) and in three Science disciplines (codes 41-42 and 45) at more than forty cities spread across India. The Online Screening Test for OCES/DGFS-2022 will be held in April, 2022. Travel Allowance is not paid for appearing in it.

(b) GATE Score: Candidates will be screened in for Selection Interview on the basis of a valid GATE-2021 or GATE-2022 Score

Cut-off GATE Scores for screening into Selection Interviews will be decided only after the Online Test has concluded and candidates are therefore advised to maximize their chances of being screened into the Selection Interview stage by availing both of the screening avenues detailed above. Screening in of applicants in Nuclear Engineering (code 29) will be only through the Online Test.

Students graduated/graduating with a Masters Degree from University of Mumbai - Department of Atomic Energy Centre for Excellence in Basic Sciences (UM-DAE CBS) and National Institute of Science Education and Research (NISER), Bhubaneswar in the academic year 2020-2021 / 2021-2022, and whose Cumulative Grade Point Average (CGPA) is greater than or equal to 7.5 on a scale of 10 will directly be screened into the Selection Interview stage, provided they meet all other eligibility requirements of the OCES/DGFS-2022 program. It is to be noted that this option of being screened in based on CGPA can be exercised only once. Such candidates should first submit their application for the OCES/DGFS-2022 program on the Online Application Portal and subsequently forward their details through the Directors of their institutes.

Selection Interviews of short-listed candidates in all disciplines except Geology will be conducted at the BARC Training School, Mumbai. Interviews in Geology will be held in Hyderabad. Outstation applicants travelling for Interview will be paid to-and-fro AC-III tier normal train fare by shortest route or actual fare, whichever is less. Selection Interviews are tentatively scheduled to be held in June-July, 2022. The list of candidates short-listed for Selection Interview will be posted on the Online Application Portal in the second half of April, 2022. Short-listed candidates will be able to choose an Interview slot, based on availability, on the Online Application Portal, in the last week of April, 2022.

Final Selection is solely on the basis of performance in Selection Interview, subject to medical fitness.

Other Opportunities: Candidates applying for OCES/DGFS-2022 may be considered for direct recruitment in Electronics Corporation of India Ltd. (ECIL) and Institute for Plasma Research (IPR). Such candidates will be governed by stipendiary norms of ECIL and IPR and terms and service conditions of ECIL and IPR respectively on absorption.

### **ELIGIBILITY CRITERIA**

A. Qualifying Degrees and Other Academic Requirements for OCES/DGFS-2022 a) For Engineering Disciplines (codes 21-29): B.E./B.Tech./B.Sc.(Engineering) / 5-year Integrated M.Tech. with a minimum of 60%\* aggregate marks in one of the 9 engineering disciplines (codes 21-29) mentioned in Table-1. Applicants opting to be considered on the basis of a GATE score must have a valid GATE-2021 or GATE-2022 Score in the same engineering discipline as the qualifying degree discipline.

Those having qualifying degree in branches like Aerospace, Automobile, Automotive, Aeronautical Engineering, Industrial Production, Reliability, Ceramics, Architecture, Geology, Mining, Communication, Information Technology, Master of Computer Applications, Dyes & Dye Intermediates, Electrochemical, Energy Systems, Oils & Fats, Paints & Varnishes, Petrochemicals, Plastics, Paper, Sugar Technology, Textiles, Mechatronics, Power Engineering, Power Plant Engineering, Control Engineering, Software Engineering, Electronics & Computer Engineering, Biomedical Electronics, Biomedical Instrumentation etc. are NOT eligible.

b) For Fast Reactor Technology-M (FRT-M, code 30): B.E. / B.Tech. / B.Sc.(Engineering) / 5-year Integrated M.Tech. in Mechanical Engineering or Chemical Engineering with minimum of 60%\* aggregate marks in qualifying degree. FRT-M is an additional Training Scheme option available to applicants belonging to Mechanical Engineering or Chemical Engineering (codes 21 and 22) and hence there will not be separate screening test or Selection Interview.

c) For Fast Reactor Technology-E (FRT-E, code 31): B.E. / B.Tech. / B.Sc. (Engineering) / 5-year Integrated M.Tech.in Electrical Engineering or Electronics Engineering with minimum of 60%\* aggregate marks in qualifying degree. FRT-E is an additional Training Scheme option available to applicants belonging to Electrical Engineering or Electronics Engineering (codes 24 and 25) and hence there will not be separate screening test or Selection

d) For Quality Assurance & Quality Control (QA&QC, code 32): B.E. / B.Tech. / B.Sc.

(Engineering) / 5-year Integrated M.Tech. in Mechanical Engineering or Metallurgical Engineering with minimum of 60%\* aggregate marks in qualifying degree. QA&QC is an additional Training Scheme option available to applicants belonging to Mechanical Engineering or Metallurgical Engineering (codes 21 and 23) and hence there will not be separate screening test or Selection interview.

- e) For Physics Discipline (code 41): M.Sc. in Physics/Applied Physics with Physics and Mathematics at B.Sc. or at subsidiary and/or ancillary level in case of 5-year integrated M.Sc, or B.E. /B.Tech. in Engineering Physics with a minimum of 60%\* aggregate marks in the qualifying degree. M. Sc. candidates (other than those applying with a 5-year integrated M.Sc. degree) must additionally have a minimum of 60%\* aggregate marks in B.Sc. Physics postgraduate applicants opting to be considered on the basis of a GATE Score should have a valid GATE-2021 or GATE-2022 Score in 'Physics'. Applicants having B.E./B.Tech. (Engineering Physics) as qualifying degree can apply on the basis of a valid GATE-2021 or GATE-2022 Score either in 'Physics' or in 'Engineering Sciences'.
- f) For Chemistry Discipline (code 42): M.Sc. in Chemistry with Physics up to B.Sc. or at subsidiary and/or ancillary level in case of 5-year integrated M.Sc. and Mathematics at Std. XII or at B.Sc. or at subsidiary and/or ancillary level in case of 5-year integrated M.Sc. with a minimum of 60%\* aggregate marks in M.Sc. All candidates (other than those applying with a 5-year integrated M.Sc. degree) must additionally have a minimum of 60%\* aggregate marks in B.Sc. Applicants opting to be considered on the basis of a GATE Score should have a valid GATE-2021 or GATE-2022 Score in 'Chemistry'. Those having M.Sc. with specialization in subjects like Industrial Chemistry, Textile Chemistry, Applied Chemistry, Environmental Chemistry, Petroleum Chemistry, Nanoscience, Nanotechnology, Pharmaceutical Chemistry etc. are NOT eligible.
- g) For Radiological Safety & Environmental Science (RSES, code 44): B.E. / B.Tech. in Nuclear Engineering / Nuclear Technology / Nuclear Science & Technology with minimum of 60%\* aggregate marks or M.Sc. in Physics or Chemistry with Physics and Chemistry up to B.Sc. or at subsidiary and/or ancillary level in case of integrated M.Sc., and Mathematics at Std. XII or at B.Sc. or at subsidiary and / or ancillary level in case of 5-year integrated M.Sc., with minimum of 60%\* aggregate marks in M.Sc. All science candidates (other than those applying with a 5-year integrated M.Sc. degree) must additionally have a minimum of 60%\* aggregate marks in B.Sc. RSES is an additional Training Scheme option to applicants belonging to Nuclear Engineering, Physics and Chemistry disciplines (codes 29, 41 and 42) and hence there will not be separate screening test or Selection interview.
- h) For Geology Discipline (Code 45): M.Sc. or equivalent M.Tech. in Geology/Applied Geology/ Applied Geochemistry with Geology at B.Sc. or 5-year integrated M.Tech. in Geological Technology. Eligible candidates must have two subjects out of Mathematics, Physics and Chemistry up to B.Sc. or at subsidiary and / or ancillary level in case of 5-year integrated M.Sc./5-year integrated M.Tech., with minimum of 60%\* aggregate marks in M.Sc./M.Tech. All eligible candidates (other than those applying with a 5-year integrated M.Sc. / M.Tech. degree) must have a minimum of 60%\* aggregate marks in B.Sc. Additionally, eligible candidates must have passed Mathematics in Std. XII. All applicants opting to be considered on the basis of a GATE Score should have a valid GATE-2021 or GATE-2022 Score in 'Geology & Geophysics'. Those having B.Tech in Geology, Mining are not eligible. i) Those having M.Sc. (by research) or Ph.D. are not eligible.
- \*A minimum of 60% marks means the marks as per the ordinances of the respective university.
- B. Admission to DGFS: Candidates having a qualifying degree in disciplines 21-28 or 41 and who meet the corresponding eligibility criteria listed above are eligible to apply for DGFS provided they secure admission for M.Tech./M.Chem.Engg. starting in the academic year 2022 in select Institutes and in specializations listed in Table-3. Confirmation of M.Tech./M. Chem.Engg. admission should be communicated after announcement of the OCES-2022 Selection List. Securing admission in one of the valid M. Tech. specializations at one of the DGFS Institutes along with Selection for OCES, does not guarantee the award of a DGFS Fellowship as DGFS is offered as per the needs of DAE programmes and only to the most meritorious candidates as per Selection Interview performance. C. Age Limit (Age as on August 1, 2022) a) General Category-26 years, b) OBC-29 years,
- C. Age Limit (Age as on August 1, 2022) a) General Category-26 years, b) OBC-29 years, c) SC/ST 31 years, d) Dependents of those who died in the riots of 1984 (Dep1984)-31 years, e) Persons domiciled in Kashmir Division of Jammu & Kashmir State from 01/01/1980 to 31/12/1989 (Dom Kashmir) 31 years.
- Physically Challenged persons of all categories are eligible for age relaxation of 10 years.
- **D. Nationality :** Applicant must be a citizen of India.
- E. Applicants working in Central/ State Government Units/ PSUs / Aided Institutes should produce a No Objection Certificate (NOC) from their organization at the time of Selection Interview, failing which they may not be interviewed.
- F. Application Fee: A non-refundable Application Fee of ₹ 500 is chargeable from the male applicants belonging to General and OBC categories. Women candidates, candidates belonging to SC/ST, Dependents of Defence Personnel Killed in Action (DODPKIA) and Physically Challenged candidates are exempted from payment of Application Fee. Candidates graduating in the academic year 2021-22 and awaiting final results may also apply. If selected, candidates who are eligible in all other respects but are awaiting final results will be allowed to commence course work. However, retention of these candidates in the OCES or DGFS programs is subject to the mark-sheet of their final result, which meets the eligibility requirements of the OCES/ DGFS programs, being submitted by Jan 31, 2023 in case of OCES TSOs and as per the requirement of the concerned DGFS Institutes in the case of DGFS Fellows.

# HOW TO APPLY- Only Online Applications will be accepted.

Candidates are required to visit the website 'http://www.barconlineexam.in' in the period January 17, 2022 to February 11, 2022 and submit an Online Application by following the instructions therein. Candidates are advised to read the 'Information Brochure' before applying.

Table-1: Eligible Disciplines at the BARC Training Schools

Mechanical	21	Computer Sc / Computer Engg / Computer Sc & Engg	26	Fast Reactor Technology-E\$\$	31
Chemical	22	Instrumentation** #	27	Quality Assurance & Quality Control \$\$\$	32
Metallurgy §	23	Civil	28	Physics†	41
Electrical #	24	Nuclear Engg <b>§§</b>	29	Chemistry <b>‡</b>	42
Electronics *#	25	Fast Reactor Technology-M \$	30	Geology	45
		Radiological Safety & Environmental Science(RSES) ##			44

\*Candidates from the related degree disciplines 'Electrical', 'Electronics & Communication', 'Electronics and Controls' are also eligible to apply under Electronics (25). However, such candidates must qualify on the basis of a valid GATE score or Online Test in Electronics (25). \*\* Candidates from related degree discipline viz. 'Instrumentation & Controls' are also eligible to apply under Instrumentation (27). However, such candidates must qualify on the basis of a valid GATE score or Online Test in Instrumentation (27). # Candidates with degree discipline 'Electrical & Electronics' can apply under either of the disciplines Electrical (24) or Electronics (25) and candidates with degree discipline 'Electronics & Instrumentation' can apply under either of the disciplines Instrumentation (27) or Electronics (25). However, such candidates must qualify on the basis of a valid GATE score or Online Test in the discipline in which they wish to be considered. † The candidates belonging to 'Physics' discipline selected for the BARC Training School at Mumbai will be allotted either Physics or RSES as their Training Schemes and those selected for the BARC Training school at IGCAR will be allotted Reactor Physics (RP) as their Training Scheme. ‡ The candidates belonging to 'Chemistry' discipline selected for the BARC Training School at Mumbai will be allotted either Chemistry or RSES as their Training Schemes and those selected for the Training school at IGCAR will pursue Nuclear Fuel Cycle Chemistry (NFCC) in the Training School. ## Radiological Safety & Environmental Science (RSES) is not a separate discipline but an additional Training Scheme option for candidates in 'Physics', 'Chemistry' & 'Nuclear Engineering'. § Candidates with B.E. / B.Tech. / B.Sc.(Engg.) / 5-year Integrated M.Tech. in 'Metallurgy & Materials Engineering', 'Metallurgy & Materials Science', 'Metallurgical Engineering', 'Metallurgical & Materials Engineering', 'Metallurgical Engineering & Materials Science' and 'Materials Science & Engineering' are eligible to apply under Metallurgy (23). §§ Candidates with B.E. / B.Tech. / B.Sc.(Engg.) / 5-year Integrated M.Tech in 'Nuclear Engineering' / 'Nuclear Technology' / 'Nuclear Science & Technology' would be considered for RSES Training Scheme at the BARC Training School, Mumbai and for 'Mechanical' and 'Chemical' Training Schemes at the BARC Training Schools in Mumbai, Kalpakkam and NFC-Hyderabad. \$ FRT-M is not a separate discipline but an additional Training Scheme option for candidates in Mechanical (21) and Chemical (22) Engg. \$\$ FRT-E is not a separate discipline but an additional Training Scheme option for candidates in Electrical (24) and Electronics (25) Engg. \$\$\$ QA&QC is not a separate discipline but an additional Training Scheme option for candidates in Mechanical (21) and Metallurgy (23).

EXERCISING AUTHORITY: In all matters concerning the OCES/DGFS-2022 recruitment, the decision taken by the Competent Authority in BARC, Mumbai shall be final and binding on the Applicants and they shall abide by the decision in totality. The Applicants while representing the matter shall not directly approach the Courts and will wait till the outcome of the decision by the Competent Authority in BARC.

In case of any claims or disputes arising with respect to the OCES/DGFS-2022 recruitment, the venue of such proceedings, suit, action, or proceedings arising out of or related thereto will be governed / maintained in accordance with the laws of Republic of India subject to exclusive jurisdiction of the courts of Mumbai, India.

Table-2: Training Schools, Eligible Disciplines, Orientation of Training

Training School	Disciplines (refer	Orientation of Training
BARC, Mumbai (Since 1957)	Table-1) 21 to 28 & 41, 42 & 44	<ul> <li>Engineering Design, Development, Operation and Maintenance of Nuclear Reactors</li> <li>Research in frontier areas of Basic and Engineering Sciences</li> </ul>
IGCAR, Kalpakkam (Since 2006)	21, 22, 25, 30, 31, 41 & 42	<ul> <li>R&amp;D and Engineering related to Fast Breeder Reactors</li> <li>Research in frontier areas of Basic and Engineering Sciences</li> </ul>
RRCAT, Indore (Since 2000)	24, 25 & 41	R&D and Engineering related to Lasers, Accelerators, Plasma Physics, Cryogenics and Superconductivity
NFC-HWB, Hyderabad (Since 2001)	21, 22, 24, 25, & 32	Operation & Maintenance and Engineering related to Nuclear Fuel Facilities and production plants for production of Heavy Water to support the Nuclear Power Program
AMD, Hyderabad (Since 2010)	45	Exploration Techniques for Uranium and other Atomic Minerals and related R&D activities

Table-3: M.Tech. / M.Chem.Engg. Specializations and Admissible Pre-M.Tech. / M.Chem.Engg. Degree-Disciplines for DGFS

Relevant M.Tech./M.Chem.Engg. Program or Name of Dept/ Centre at the M.Tech./ M.Chem.Engg. Institute	Pre-M.Tech./M.Chem.Engg. Degree (Disciplines)	Institutes**
Mechanical Engineering	B.E./B.Tech./B.Sc. (Engg) (Mechanical)	All except ICT
Cryogenic	B.E./B.Tech./B.Sc. (Engg) (Mechanical)	Kh
Chemical Engineering	B.E./B.Tech./B.Sc. (Engg) (Chemical)	All except Rkl
Applied Mechanics	B.E./B.Tech./B.Sc. (Engg) (Civil/ Mechanical)	М
Civil Engineering	B.E./B.Tech./B.Sc. (Engg) (Civil)	All except Rkl, ICT
Earthquake Engineering	B.E./B.Tech./B.Sc. (Engg) (Civil)	K, R
Nuclear Hydrology	B.E./B.Tech./B.Sc. (Engg) (Civil/ Chemical)	R
Metallurgical Engineering, Materials Science, Materials Engineering	B.E./B.Tech./B.Sc. (Engg) (Metallurgy/ Metallurgical Engg. / Materials Engg./ Metallurgical & Materials Engg./ Materials Science & Engg./ Metallurgy & Materials Engg./ Metallurgy & Materials Science/ Chemical)	All except G, ICT
Electrical Engineering	B.E./B.Tech./B.Sc. (Engg) (Electrical/ Electronics / Electrical & Electronics Engineering / Electronics & Control Engg./ Electronics & Communication Engg./ Electronics & Instrumentation Engg.)	All except G, ICT
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Relevant M.Tech./M.Chem. Engg. Program or Name of Dept/ Centre at the M.Tech./ M.Chem.Engg. Institute	Pre-M.Tech./M.Chem.Engg. Degree (Disciplines)	Institutes**
Reliability Engineering, Systems & Control Engineering, Energy Systems	B.E./B.Tech./B.Sc. (Engg) (Mechanical/ . Chemical / Electrical/ Electrical & Electronics Engineering / Electronics & Control Engg./Electronics & Communication Engg./ Electronics & Instrumentation Engg)	B, D, Kh, R
Power/ Communication/ Control Engg, Integrated Electronics & Circuits	B.E./B.Tech./B.Sc. (Engg) (Electrical/ Electronics / Electrical & Electronics Engineering / Electronics & Control Engg./Electronics & Communication Engg./ Electronics & Instrumentation Engg.)	D, G, R
Instrumentation	B.E./B.Tech./B.Sc. (Engg) (Electrical/ Electronics/ Instrumentation / Electrical & Electronics Engineering / / Electronics & Control Engg. / Electronics & Communication Engg./ Electronics & Instrumentation Engg.)	Kh,M,R
Computer Science, Engineering & Technology	B.E./B.Tech./B.Sc. (Engg) (Computer Science / Computer Engineering/ Computer Science & Engineering / Electrical / Electronics / Electrical & Electronics Engineering / Electronics & Control Engg./Electronics & Communication Engg./ Electronics & Instrumentation Engg.)	All except Rkl, Var,ICT
Applied Optics, Lasers & Opto- electronics	B.E./B.Tech./B.Sc. (Engg) (Electronics) / Electrical & Electronics Engineering / Electronics & Control Engg./Electronics & Communication Engg./ Electronics & Instrumentation Engg.)/ M.Sc. (Physics / Applied Physics)	D
Nuclear Engineering & Technology	B.E./B.Tech./BSc (Engg) (Mechanical/ Chemical/ Electrical/ Electronics / / Electrical & Electronics Engineering / Electronics & Control Engg./Electronics & Communication Engg./ Electronics & Instrumentation Engg.))	К
Solid State Materials/ Electronic Materials	B.E./B.Tech./B.Sc. (Engg) (Electrical/ Electronics) / Electrical & Electronics Engineering / Electronics & Control Engg./Electronics & Communication Engg./ Electronics & Instrumentation Engg.)/ M.Sc. (Phy/ App. Phy)	D, R
Electronics Engg, Electronics and Communication Engg	B.E./B.Tech./B.Sc. (Engg) (Electrical/Electronics / / Electrical & Electronics Engineering / Electronics & Control Engg./Electronics & Communication Engg./ Electronics & Instrumentation Engg.)	Rkl & Var

<sup>\*\*</sup> Institutes where specified M.Tech./ M.Chem.Engg. courses are offered under this scheme: B = IIT Bombay; D = IIT Delhi; G=IIT Guwahati; K = IIT Kanpur; Kh = IIT Kharagpur; M = IIT Madras; R = IIT Roorkee; Rkl = NIT Rourkela; Var = IIT-(BHU)- Varanasi; ICT = Institute of Chemical Technology. Mumbai.

ogy, Mumbai.

Number of DGFS Fellows selected in each approved M.Tech. /M.Chem.Engg. specialization at the Institutes under the DGFS scheme will depend upon the requirements of DAE.

Important Dates (All Dates are Tentative and Applicants must visit Online Application Portal regularly for updates)				
Launching of Online Application Portal for OCES/DGFS-2022	17 <sup>th</sup> Jan, 2022			
Last date for Online Application	11 <sup>th</sup> Feb, 2022			
Online Test	7 <sup>th</sup> April, 2022 to 13 <sup>th</sup> April, 2022			
Last date for candidates to upload their GATE-2022 score	13th April, 2022			
Display of List of candidates short-listed for Interview on Online Application Portal	28 <sup>th</sup> April, 2022			
Availability based option on Online Application Portal to select Interview Slot for qualified candidates	30 <sup>th</sup> April - 4th May, 2022			
Selection Interviews	14 <sup>th</sup> June – 31 <sup>st</sup> July, 2022			
Display of List of Candidates finally selected for <b>OCES-2022</b> on Online Application Portal	18 <sup>th</sup> August, 2022			
Last Date for Selected <b>OCES-2022</b> Candidates desirous of DGFS to give details of M.Tech/ M.Chem.Engg. admission in a DGFS institute	20 <sup>th</sup> August, 2022			
Declaration of List of Applicants Selected for <b>DGFS-2022</b> on Online Application Portal	2 <sup>nd</sup> week of Sept, 2022			

Persons desiring to apply for the OCES / DGFS – 2022 programs may visit the website http://www.barconlineexam.in after January 17, 2022 and follow the instructions therein.