**PROSPECTUS** 



NATIONAL INSTITUTE OF ELECTRONICS & INFORMATION TECHNOLOGY, KOHIMA &

RURAL EXTENSION CENTRE, CHUCHUYIMLANG
Ministry of Electronics & Information Technology, Govt. of India



# **Prospectus**

NIELIT, Kohima

and

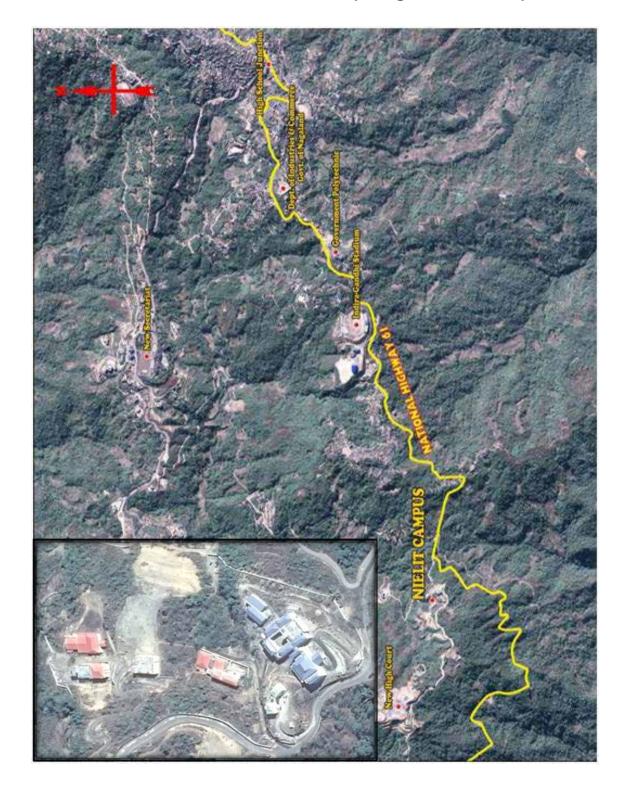
**NIELIT Rural Extension Centre Chuchuyimlang, Mokokchung** 

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# NIELIT CAMPUS LOCATION (Google Earth View)



# 1. ABOUT NIELIT, KOHIMA

Located on the outskirts of Kohima, the National Institute of Electronics & Information Technology (NIELIT), Kohima with its stately architecture surrounded by lush verdant and picturesque rolling hills, it has world-class infrastructure that facilitates excellence in teaching, training and other professional activities. It is a national level technical Institute under NIELIT, New Delhi, an autonomous scientific body of Ministry of Electronics & Information Technology, Govt. of India. The inception of NIELIT Kohima fall out in May 2004 and became operational in July, 2004. NIELIT campus is located at Meriema (NH-61), below New High Court complex, Kohima on a 15-acre plot of land provided by the Govt. of Nagaland.

As a symbolic gesture of generosity to the people of Nagaland, the honorable Prime Minister of India commissioned and sanctioned the setting up of NIELIT in October 2003. NIELIT, Kohima is operationally under the administrative control of NIELIT, New Delhi. NIELIT Kohima has been aptly declared as a Centre of Excellence by the Government of Nagaland.

Around 30 prestigious academic institutions and Universities in Nagaland have tied up with NIELIT Kohima for running NIELIT courses as part of their vocational courses in IT sector. NIELIT Kohima also aspires to be a hub of innovative activity and is continuously on the lookout for opportunities to collaborate with the government, the public and private sectors and other academic institutions to create, disseminate and impart digital literacy. Further, NIELIT Kohima caters to various Government Departments who are keen to avail our services pertaining to IT and its allied disciplines.

# **VISION**

Aspire to smartly contribute progressively in the development of industry-oriented quality education and training and to be the country's premier Institution for examination and certification in the field of Information, Electronics and Communications Technology (IECT).

### MISSION

To be the efficient singular source for quality assurance in computer education among the nation's non-formal institutes. After drawing out successful competent IT professionals in large numbers, NIELIT is now being extended to all regions of the country as well as overseas.

NIELIT offers training programs to improve employment opportunities and facilitate availability of quality IT manpower, which will contribute to the growth of IT industry in the region, particularly in Nagaland.



A special feature of NIELIT is the provision of a balanced amalgamation of formal and non-formal sector courses. Such an amalgam will provide opportunities for education and training in Computers and Information Technology and related disciplines not only to school passed-outs with Science and Mathematics background; but also to students with Commerce, Arts, Humanities and Social Sciences background. The later will thus have the opportunity to join the non-formal sector courses in Computer and related disciplines.

At present, the institute offers various courses in the field of IT & related discipline viz. (i) Bachelor of Computer Application (BCA) affiliated to Nagaland University (ii) DOEACC "O," "A," "CHMO," "CHMA" and "MAT-O" Level courses (iii) Short Term IT Courses and (iv) ITE & Soft Skills Training Programme. So far, the Institute has trained around 30,000 trainees in IT and related courses / fields and more than hundreds trainees have found placements in various public and private sectors through the campus placement ship organized by the Institute. Many of the ex-trainees are successfully self-employed and are employed in the private and govt. sectors.

NIELIT Kohima also features a Cyber Forensics Lab and Training facility, an R&D Project setup in the year 2010 sponsored by the Department of Electronics & Information technology, Ministry of Communications and Information Technology, Government of India. This branch has been catering its services to law enforcement agencies both within Nagaland and its adjoining regions for solving cyber relatedW crimes.

e-Governance, the flagship project of NIELIT, Kohima under the patronage of the Ministry of Electronics & Information Technology, Govt. of India has also been adding noteworthy contributions to the vast realms of the nation's Capacity Building program. This project is in essence, the application of Information and Communication Technology to government functioning in order to create "Simple, Measurable, Accurate, Relevant and Transparent" (SMART) governance. Keeping in view this objective, NIELIT, Kohima has been designated as the Institution Partner by the Government of Nagaland and it has associations with governmental departments to impart efficient IT training to the government employees in the area of IECT. This has made easier the availability of public services at the doorsteps of citizens on the basis of revolutionary changes in our institutional structures, procedures and practices, and transforming the relationships between the government, our businesses and our citizens.

A rural extension centre of the institute was also set up at Nagaland Gandhi Ashram (NGA), Chuchuyimlang Village (178 KM from Kohima), Mokokchung District in August, 2006. The main objective of the extension centre is to provide IT literacy among the rural youths in and around the district.

NIELIT Kohima also has a Study Centre at Nagaland University HQs, Lumami, and four (4) Training Centres at Mon, Tuensang, Longleng and Kiphire District HQs.



# **SOME MAJOR ACHIEVEMENTS**



Around 30,000 students trained in IECT since inception.



Provided IT training and services to:

- Fashion Technology under Govt. of Nagaland.
- Department of Science and Technology, Govt. of Nagaland.
- Department of Agriculture, Govt. of Nagaland.
- Nagaland University.
- State AIDS Control Society.
- School Education Department, Nagaland.
- Technical Education Department, Nagaland.
- Police Department, Nagaland.
- Comptroller and Auditor General of Nagaland.
- · Postal Department of Nagaland.
- Department of Women Development, Govt. of Nagaland.



Developed and maintained Aircel Naga Idol website.



Developed Pension software for CAG Kohima.



In-house developed software for all management needs.



First ever cybercrime case in Nagaland was detected and solved.



Designated as Institution Partner by the Government of Nagaland to promote e-Governance as a tool, and to deliver to its citizens, a Government, that is more proactive, transparent and responsive.



Institution-cum-host partner for the 2<sup>nd</sup> eNorth-East summit.



Cybercrime Case Management System developed and deployed for management of cases. The System makes available information details regarding case details, status, types and number of exhibits, IO details, etc.



Skill Knowledge Provider to Polytechnic Colleges in Nagaland under Technical Education Dept for implementation of AICTE community college schemes.



Successfully undertaken projects and ongoing major projects:

- Cyber Forensics R&D and Training Facilities: The first of its kind in Nagaland, State-of-the-art Cyber Forensics R&D Lab and Training Facilities has been setup at NIELIT Kohima. It serves as the resource Centre for NE region imparting training and forensics analysis services to the law enforcement agencies and forensic examiner. So far, more than 500 LEAs/forensic examiners are trained in digital forensics and IT Act and total, 80 cybercrime cases forwarded to the Forensics Lab have been analyzed to extract digital evidence and solved the cases.
- Centre of Excellence for Cyber Forensics: In recognition of the successful implementation of the projects and expertise available atNIELIT Kohima, the Govt. of India has highlighted in the "Digital North East Vision 2022" document wherein it has mentioned that existing cyber forensics lab will be upgraded with funding support from MeitY as a Centre of excellence (CoE) for Cyber forensics in the NER and a dedicated training facility of 50 seats would be established. The CoE will also facilitate Training of Trainers.
- Ongoing project for Setting up of State of Art Digital Forensic Data Centre in order to facilitate forensic services including remote forensics live acquisition and analysis of digital evidence, web based virtual training services to Northeastern States. To provide cloud based services, Digital Forensic Data Centre will be set up at NIELIT Kohima with two extended labs at NIELIT Imphal and NIELIT Aizawl.
- Medical Electronics Lab and Training Facilities: Medical Electronics
   Lab equipped with latest equipment is set up for providing repair
   and maintenance services of medical electronics equipment of
   hospitals in Nagaland. Training has been provided to state govt.
   paramedical staff and local youths. The training has generated
   host of job related opportunity and 21 students were employed
   through campus placement and posted in different locations
   across the State. With the setup of such facility, downtime of
   biomedical equipment has reduced and improve the services

in the State. Further, MOU was signed with Faber Sindoori Management Services Pvt. Ltd, Chennai, a leading company in biomedical engineering industry for exchange of knowledge and industrial exposure of students and youths of the NE region.

- Skill Training to underprivileged ST youths and women under IT for Masses Project: With the focus to empower underprivileged sections of the society and provide better livelihood opportunities, training centres were set up for the first time in the four backward districts: Mon, Tuensang, Longleng and Kiphire for training in IT, digital marketing and soft skills. In addition, it has helped streamline the untapped potential especially school drop-outs and women. The sole vision of the project is to ensure that the targeted trainees particularly the underprivileged youth embraces technological advancement to stay ahead of the curve. To date, 683 males and 724 females have been trained.
- Capacity Building of State Govt. Officials: Under Capacity Building
  of technical assistance scheme of Ministry of DONER, 275 govt.
  employees from 42 departments have been trained in IT & Digital
  services including GST and digital payments.
- Cyber Security Project: Training and awareness programmes conducted for the most vulnerable sections of society-govt. employees, schools, colleges-with more than 6000 people trained. Extensive public oriented appraisals on cyber security delivered through AIR, print media, social networking sites and Talk Show on DDK and circulated "Cyber Security Handbook" translated in local languages.
- E-Governance Project: The project under the sponsorship of the Ministry of Department of Electronics & IT has proven instrumental in addressing the capacity building needs at different levels of the state-government functioning to attain universal computer literacy in the State Government setup. Sensitization workshops/trainings imparted to penetrate all district HQs covering 600+ State Govt. employees and 2548 students. Field visits were arranged for exposure to e-Gov infrastructure like SWAN, State Data Centre (SDC) and interacted with experts.
- Signed MoU with Industries & Commerce Department, Govt. of Nagaland: MoU signed with the department for capacity building and skilling of youths in IECT in line with the digital India vision and to evolve as a collaborative training centre through setting up

- of a subcentre at Dimapur, commercial hub of the State.
- Women Empowerment project under the Ministry of DONER have trained 401 female trainees on Information Technology Enabled Services (ITES).
- ST/SC Sub-Plan: To uplift the economically and socially deprived sections of the society, NIELIT Kohima has been facilitating the services of imparting free education and trainings on IT courses and related skills to the ST/SC students and job-seekers alike under the SCSP/TSP Sub-Plan sponsored by different ministries like Communications & IT, Labour and Employment, Govt. of India.
- Digital Financial Literacy Campaign: Workshops and awareness programmes conducted for 1708 merchants, citizens, students, govt. officials, etc in cashless transactions and other online banking services and to promote a digital cashless economy.
- Information Security Workshops/Training under ISEA Project Phase II: As part of ISEA Programme initiated by the Government of India, NIELIT Kohima is conducting training for school students and college goers and also for government officials. So far, 150 officials and 700 students and teachers have been trained.



NIELIT Kohima also serves as a Local Infrastructure Service Provider (LISP) for various other entities, to name a few:

- Conducting online entrance examinations for universities like the KIIT (Kalinga Institute of Industrial Technology) University and the Sikkim University.
- Conducting promotion-related examinations for the offices of the CAG (Comptroller and Auditor General of India)
- NIELIT, Kohima also has tie-ups with TCS (Tata Consultancy Service) for conducting online recruitment examinations for the RBI, SBI, LIC, Bank of India and other nationalized banks.
- Conducting various State departmental exams, NPSC and central exams such as NEET, AFCAT, STAR and RPF.

# **AREAS OF EXCELLENCE**

- Cyber Security
- Cyber Forensics
- Medical Electronics

# 2. ABOUT NIELIT HEAD QUARTER, NEW DELHI

# **NIELIT Head Quarter, New Delhi:**

An autonomous organization under the Ministry of Electronics & Information Technology, Govt. of India, the prime objective of NIELIT is to usher the most updated global industry-relevant computer education. within the increasing reach of many.

NIELIT is presently implementing a joint scheme of All India Council for Technical Education and Department of Electronics & Information Technology (formerly Department of Electronics (DoE)), Government of India. The objective of the Scheme is to develop quality manpower in IT by

utilizing the existing available expertise in computer training institute which have certified accreditation of conducting the following specified Levels of courses, subject to the

fulfillment of well-defined norms and criteria.

1. An IT Literacy course namely, Course on Computer Concepts (CCC) is offered by the NIELIT all over the country.

2. The other level of courses are:

O Level- Equivalent to Foundation level course

A Level - Equivalent to Advanced **Diploma in Computer Applications** 

**B Level** - Equivalent MCA Level

C Level - M. Tech Level

**Apart from Authorized Institutes** conducting accredited courses in the private/public sector, NIELIT has its

own 31 centres all over India. The Centres are engaged in offering Long Term Courses and Short Term Courses in the area of IECT.

3. Bio-Informatics Courses are being launched at two levels designated as BI-O and BI-A levels. The courses are so designed as to give impetus to

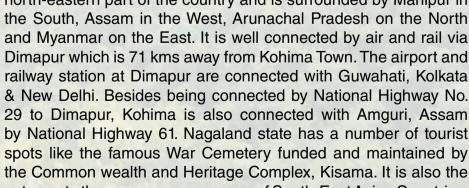
students to proactively participate as a member of a core team involved in the bio-informatics programming task. The students after qualifying these levels would be able to find the opportunities in the area of Bio-informatics in Drugs, Pharmaceuticals, Bio-fertilizers, and Agriculture and energy sectors.

4. NIELIT has launched ITE & Soft Skills Training programme for the benefit of the students of North East India with the financial support from the Department of Development of North Eastern Region (DoNER).

# 3. LOCATION & CONNECTIVITY

The National Institute of Electronics & Information Technology (NIELIT) Kohima is located at Meriema (NH-61), New High Court Road, Kohima, Nagaland-797001. It is about 12 kms away from Kohima Town and one & half kms away from Indira Gandhi Stadium, Kohima. The Institute is surrounded by other Institutes & govt. offices like Nagaland University (Kohima Campus), High Court, Directorate of Women Department etc.

Kohima, the capital of Nagaland, is nestled in the hills of the north-eastern part of the country and is surrounded by Manipur in the South, Assam in the West, Arunachal Pradesh on the North and Myanmar on the East. It is well connected by air and rail via Dimapur which is 71 kms away from Kohima Town. The airport and 29 to Dimapur, Kohima is also connected with Amguri, Assam spots like the famous War Cemetery funded and maintained by the Common wealth and Heritage Complex, Kisama. It is also the gateway to the prosperous economy of South-East Asian Countries.



# 4. INFRASTRUCTURE & FACILITIES

NIELIT, Kohima Campus has separate sectional departmental blocks viz. 3 storied administrative building, 3 storied academic building, workshop, power house, girls' hostel, boys' hostel, guest house, staff guarters, auditorium, market place and library. The buildings are securely connected by internal roads. The campus is fenced and 4 entrance gates are monitored round the clock by experienced, well trained security personnel. For security, the campus and buildings are monitored by CCTV surveillance cameras.

At present NIELIT have the following facilities:

12 Classrooms with capacity of 30 (Thirty) students each.

2 Classrooms cum Examination hall with capacity of 72 (seventy 02 two) students each.

03 6 Computer Labs with 20 (twenty) branded computers each.

1 Computer Lab with 30 (thirty) branded computers.

1 Multimedia training Lab with 20 high-end Computers.

06 2 PC Assembly & Maintenance Lab of 40 students capacity.

1 Basic Electronics Lab of 20 students capacity. 07

08 1 Networking lab of 20 students capacity.

1 Mobile Repairing lab of 10 students capacity. 09

1 R&D and Training facility Lab on Cyber Forensics. 10 1 Medical Electronics Lab. 11 12 1 Virtual Smart Classroom. 13 ITE & Soft Skills Training room with audio-visual teaching aids. 14 NIELIT Intranet & Local Area Network (LAN) System. ≥ 24 hrs Power Backup facility with DG Sets & Online UPS. 15 16 100 mbps broadband connection from NKN, India. 17 Separate Administrative and Academic buildings. 18 Staff/Faculty cabins. 19 Cafeteria with separate sitting arrangement for students and staff. An acoustic treated auditorium hall of 200 seating capacities and 20 conference hall. Well-furnished Library with computerized library management 21

systems.

# Local Area Network & Internet Connections

NIELIT has more than 280 nos. of branded Desktop PCs on LAN system connected to 4 Servers through hardware firewall. One dedicated antivirus server is installed for protection from worms, viruses and other threats. Student to machine ratio is 1:1 (one machine per student) for all the courses/batches. There are two ISPs connected to the



institute at present for providing internet access viz. 2 mbps from NIC, Kohima and 100 Mbps from NKN, Govt. of India.

# 1-1

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# 4.2 Computer Lab

There are 7 nos. of general computer labs and 1 Multimedia lab at present. 6 labs and the Multimedia lab have 20 capacity each and 1 lab has 30 capacity. The platform environment working with PC's at these labs are Windows XP, Windows 7 and Windows 8. All the labs are well-furnished and equipped with Projection System, Whiteboard



and furniture. All the computers in the labs work on licensed software like Microsoft Office, Visual Studio 2010, Oracle Software etc., besides programming languages and other application software tools. The PCs in these labs can share resources among each other and has access to Intranet resource & Internet. Multimedia lab has high end PCs and licensed multimedia software like Adobe CS6, 3D Studio Max, Sound Forge, Maya, CorelDraw Suite X6 etc., are deployed to these computers for providing training.

# 4.3 Medical Electronics Lab

The Lab is well equipped with the required instruments. The Lab has the latest updated electronic devices like different Sensor, X-Ray machine, digital IC Training Kit, Digital Storage Oscilloscope, Multi Para Monitor, Ultra Sound, Pulse Oximeter Simulator -Tester, etc.



The students are trained and imparted on the overall knowledge and concepts of repairing, maintenance and the safety usage of the devices, applying both theory and practical sessions. After successful execution of the repaired components by the Trainees, it undergoes the process of safety checking by the instructor using Electrical Safety Analyzer.

# 4.4 PC Assembly & Maintenance Lab

In this lab, facility is provided for practicing assembly & maintenance of PCs and its accessories using different computer brands & components. We also provide facility for practicing basic network setup using Desktops, Server, Switches, Routers and network Cables, etc. Training capacity of the lab is 40 students at a time.





# **Basic Electronics Lab**

The lab is equipped basic electronic with like Oscilloscope. instruments Constant Voltage transformer, Multimeters, Function Generator, Microcontroller kits, various trainers' kits etc. 20 students can be given hands-on training in this lab at a time. In addition to these physical devices, the lab also has computer



based simulation software called MULTISIM for electrical & electronics circuit design.

# 4.6 Cyber Forensics Lab

Computer Forensic is fast emerging as a critical area leaving no room for any discrepancies, where if any, a single anomaly indicates total wipe out. Hence, it is important to have standard education & training and Computer and Network Forensic lab facility. NIELIT has set up an R&D Forensic & Training facility lab



with tools and technologies available in the area of Computer and Network Forensic to demonstrate actual security attacks and remedial measures to test the effectiveness of protection and help in tackling security threats effectively. NIELIT Kohima helps law enforcement agency of the State in tackling and solving cyber-crime cases of the state.

Off-line cyber forensic imaging & laboratory and online cyber forensic analysis facilities are available. This environment facilitates utilization of various tools and technologies used for protection of information, networks and system.

# Workshop

The centre has dedicated a 40x20 soft space for setting up a workshop at the campus. This workshop is especially for offering engineering programmes in the field of information technology. electronics and allied fields.





# 4.8 Power Back-Up Facility

Twenty-four hour power backup facility is available. There are three numbers of 20 KVA online UPS systems for providing backup. Two Diesel Generator Sets of capacities 125 KVA & 160 KVA are available to provide uninterrupted power supply when there is no normal power supply. One 250 KVA Dedicated Transformer is also





installed at the Institute. Apart from these facilities, the Institute has proper indoor and outdoor lighting. All these equipment and facilities are supported by proper electrification works and safety mechanisms.



# Classrooms & Examination Hall

There are 12 nos. of classrooms with a capacity of 30 students each. All the classrooms are well equipped with whiteboard and projector connected to a PC. A classroom with well-equipped audio visual teaching aids is dedicated for ITE & Soft Skills Training Programme. In addition to these, the institute has 2 examination halls with a capacity of 72 students each.





# 4.10 Auditorium & Conference Hall

The institute has a state-of-the-art acoustic-treated auditorium with a total capacity of 200 seats. It is equipped with a projector, good lighting and sound system. All major functions including annual day award functions, competitions, etc are held in this auditorium which gives a variety of exposure to the students in showcasing their talents





and groom their inborn virtues.

NIELIT Kohima also has a fully equipped Conference room with Video Conferencing facilities, with a seating capacity of 20 people, offering good quality audio and video ideal for conference calls and conducting important meetings

# **4.11** E-Learning Facility

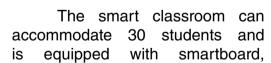
A Learning
Management System (LMS)
software called MOODLE is made
available in our intranet. E-learning
contents of Course on Computer
Concepts (CCC), DOEACC "O" Level
and DOEACC "A" Level courses are
integrated with MOODLE. Students



as well as teachers can access the contents whenever needed. The software is also used for delivering lectures by the faculty and also conducting internal tests, quizzes and self-tests for the students.

# 4.12 Smart Classroom

Keeping up with latest technology is the classroom, the centre features a smart teaching space with available technological equipment which was introduced for aiding and enhancing instruction of various courses.





audiovisual aids, etc. Smart classes use all interactive modules like videos and presentations and other visually attractive methods of teaching, targeting the audio-visual senses of students which help the students store information rapidly and more effectively. Smart classroom promotes active interaction between teacher and student , thereby balancing equal participation from both parties involved



# 5. LIBRARY

NIELIT Library has more than 5500 volumes of books on Computer, Electronics and allied fields. All prescribed books for all the courses are available in the library. Students can borrow 3-4 books at a time. Library catalogue and issue / receipt operation of books are computerized using in-house software called "Library Management System".

NIELIT library has subscriptions for 10 monthly magazines/journals. Some of the magazine/journals are:

**Open Source** Electronics for you Facts for you Better Photography Chip Compu Var Incredible Nagaland Digit Readers Digest





Apart from these, NIELIT has subscription of Employment News, National level newspapers, one local dialect newspaper, three regional local newspapers, journals and magazines. Uninterrupted Internet facility is available in the library for easy access of electronic magazines & journals like IEEE through website as well as searching books/magazines/journals through internet.

Digital Xerox machine is available for both students and faculties for the purpose of printing copies of study materials.

# 6. HOSTELS

Total intake capacity of the girls' hostel is 60 and boys' hostel is 100. Preference for hostel admission is prioritized to students coming from other districts and states admitted for long term professional courses at the institute.





# 7. FACULTY & STAFF

NIELIT has well experienced and qualified teaching faculty. The faculties undergo trainings from time to time to update their knowledge and teaching skills in various advancements of technologies. Overall administration of the institute is supervised and monitored by the Director. In addition, there are separate officersin-charge to oversee the academic section and administrative section.

# 8. COURSES OFFERED

#### 8.1 IECT Professional Courses

The lists of IT Professional Courses offered currently at the Institute are:

Bachelor of Computer Application (BCA)

Diploma in Computer Science & Engineering / Information Technology

DOEACC 'A' Level (Advance Diploma Course in Computer Application)

DOEACC 'O' Level (Foundation course in Computer Application)

MAT-O Level (Diploma in Multimedia & Animation Technology)

DOEACC "CHMA" Level (Advance Diploma in Computer Hardware Maintenance & Networking)

DOEACC 'CHMO' Level (Diploma in Computer Hardware Maintenance)

## 8.2 Short Term Certificate Courses in IECT

List of various short term certificate courses currently being offered at the institute with prerequisite eligibility & duration is given below:

- 1. Advanced Diploma in .Net Technologies
- 2. Advance Diploma in Computer Application Accounting & Publishing
- 3. Diploma in Computer Application & Networking (DCAN)
- 4. Diploma in Installation & Repair of Consumer Electronics Products
- 5. Certificate course in Cyber Forensic
- 6. Repair & Maintenance of Power supply, Inverter & UPS
- 7. Repair & Maintenance of ECG and ICCU Equipment
- 8. Assembly & Maintenance of Personal Computer
- 9. Certified Multimedia Developer
- 10. Certificate course in ITeS & Soft Skills
- 11. Certified Android Apps Developer
- 12. Certificate course in PC Assembly & Maintenance
- 13. Certified Graphics Designer
- 14. Certified Audio Visual Designer
- 15. Certified course in Web Designing
- 16. Certificate Course in Financial Accounting using Tally
- 17. Certificate course in Mobile Repair & Maintenance
- 18. Certificate course in Information Security & Cyber Law
- 19. Certified 2D Animator
- 20. Course on Programming languages like C, C++, Java, C#, Oracle
- 21. Course on Computer Concepts (CCC)
- 22. Basic Computer Course (BCC)

In addition to the above courses, NIELIT provides customized training programmes on IT and allied courses to various organizations and institutions as per the requirement. For such a training programme, interested group/organization must submit an application mentioning the interested area of training, duration and no. of participants, etc.

POPESSIONAL

# 9. INTAKE CAPACITIES

## LONG TERM COURSES

SL	Name of the Course	Intake	Remarks
1.	Bachelor of Computer Application (BCA)	60	Semester System (May - June) (3 yrs)
2.	Diploma in Computer Science & Engineering / Information Technology	60	Semester System (May - June) (3 yrs)
3.	DOEACC "A" Level (Advance Diploma Course in Computer Application)	60	2 batches per year (January & July) (1½ yr)
4.	DOEACC "O" Level (Foundation course in Computer Application)	120	2 batches per year (January & July) (1 yr)
5.	MAT-O Level (Diploma in Multimedia & Animation Technology)	20	2 batches per year (February & August) (1 yr)
6.	DOEACC "CHMA" Level (Advance Diploma in Computer Hardware Maintenance & Networking)		
7.	DOEACC "CHMO" Level ( Diploma in Computer Hardware Maintenance) 40		2 batches per year (February & August) (1 yr)

#### **SHORT TERM COURSES**

SL	Name of the Course	Intake	Remarks
1.	Advanced Diploma in .Net Technologies	20	6 months / 420 hours
2.	Advance Diploma in Computer Application Accounting & Publishing	20	6 months / 200 hours
3.	Diploma in Computer Application & Networking (DCAN)	20	6 months / 360 hours
4.	Diploma in Installation & Repair of Consumer Electronics Products	20	6 months / 350 hours
5.	Certificate course in Cyber Forensic	10	6 months / 500 hours
6.	Repair & Maintenance of Power supply, Inverter & UPS	20	6 months / 350 hours
7.	Repair & Maintenance of ECG and ICCU Equipment	20	6 months / 300 hours
8.	Assembly & Maintenance of Personal Computer	20	6 months / 240 hours
9.	Certified Multimedia Developer	20	6 months / 200 hours
10	Certificate course in ITeS & Soft Skills	20	3 months / 200 hours
11.	Certified Android Apps Developer	20	2 months / 100 hours

12.	Certificate course in PC Assembly & Maintenance	20	2 months / 80 hours
13.	Certified Graphics Designer	20	2 months / 80 hours
14.	Certified Audio Visual Designer	20	2 months / 80 hours
15.	Certified course in Web Designing	20	2 months / 80 hours
16.	Certificate Course in Financial Accounting using Tally	20	2 months / 80 hours
17.	Certificate course in Mobile Repair & Maintenance	10	2 months / 80 hours
18.	Certificate course in Information Security & Cyber Law	10	2 months / 80 hours
19.	Certified 2D Animator	20	2 months / 80 hours
20.	Course on Programming languages like C, C++, Java, C#, Oracle	20	2 months / 80 hours
21.	Course on Computer Concepts (CCC)	20	2 months / 80 hours
22.	Basic Computer Course (BCC)	20	1 month / 36 hours

As per the Government of India policy/scheme, we provide free training program to SC/ST candidates for the above mentioned courses.

# **10. COURSE FEE STRUCTURE**

# 10.1 Fee Structure for Bachelor of Computer Application (BCA)

Total course fee for Bachelor of Computer Application (BCA) is ₹ 1,00,000/-including caution money deposit of ₹ 3000/-. The course fee can be paid semesterwise. Semester-wise fee structure amount is as follows:

	First Semester	Amount in ₹
1.	Admission Fee	4000
2.	Tuition fee	7150
3.	Sports & Cultural fee	600
4.	Exam & stationery fee	500
5.	Library fee	400
6.	Identity Card fee	300
7.	Computer fee	6800
8.	Caution money deposit	3000
	Total (₹ )	22,750/-

**N.B.** Caution Money will be refunded after fulfilling the mandatory criteria viz. attendance percentage, caution money deposit receipt, course completion etc.

	Remaining Semester	Amount in ₹
1.	Tuition fee	7150
2.	Sports & Cultural fee	600
3.	Exam & stationery fee	500
4.	Library fee	400
5.	Computer fee	6800
	Total (₹)	15,450/-

# 10.2 Fee structure for DOEACC O, A, CHM-O, CHM-A & MAT-O Level Courses

Course fee for 'O' Level is ₹23,850/-, 'A' Level is ₹45,250/-, 'CHMO' Level is ₹26,150/-, 'CHMA' Level is ₹50,700/- and 'MAT-O' Level is ₹36,125/- which include caution money. Detailed fee structure and semester-wise fee is as follows:

/	First Semester	0	Α	СНМ-О	CHM-A	MAT-O
1.	Admission & Registration Fees	2000	3000	2550	3500	2625
2.	Tuition fee	4075	6550	4850	7300	5400
3.	Sports & Cultural fees	600	600	600	600	600
4.	Exam & stationery fee	500	500	500	500	500
5.	Library fee	400	400	400	400	400
6.	Identity Card fee	300	300	300	300	300
7.	Computer fee	4200	5100	4300	6000	8700
8.	Caution money deposit	2000	2500	2000	2500	2000
	Total (₹ )	14,075	18,950	15,500	21,100	20,525

	Remaining Semester	0	Α	СНМ-О	CHM-A	МАТ-О
1.	Tuition fee	4075	6550	4850	7300	5400
2.	Sports & Cultural fees	600	600	600	600	600
3.	Exam & stationery fee	500	500	500	500	500
4.	Library fee	400	400	400	400	400
5.	Computer fee	4200	5100	4300	6000	8700
	Total (₹)	9,775	13,150	10,650	14,800	15,600

**N.B.** Caution Money will be refunded after fulfilling the mandatory criterion viz. attendance percentage, caution money deposit receipt, course completion etc.

# 10.3 Fee Structure for Diploma in Computer Science & Engineering

Total course fee for Diploma in Computer Science & Engineering (DCSE) / Information Technology (DIT) is ₹ 1,03,500/- including caution money deposit of ₹ 3000. The course fee may be paid semester-wise. Semester-wise fee structure amount is as follows:

	First Semester		Amount in ₹
1.	Admission Fee		3900
2.	Tuition fee		7450
3.	Sports & Cultural fee		600
4.	Exam & stationery fee		500
5.	Library fee		400
6.	Identity Card fee		300
7.	Computer fee / Lab fee		7100
8.	Caution money deposit		3000
		Total (₹ )	23,250/-

	Remaining Semester		Amount in ₹
1.	Tuition fee		7450
2.	Sports & Cultural fee	1/4	600
3.	Exam & stationery fee		500
4.	Library fee		400
5.	Computer fee / Lab fee		7100
	'	Total (₹ )	16,050/-

### 10.4 Fee Structure for Short Term IECT Courses

SI No	Name of the course	Fee (in ₹)
1	Diploma in Computer Application & Networking (DCAN)	22,050
2	Course on Computer Concepts (CCC)	4,800
3	Basic Computer Course (BCC)	2,100
4	Certificate course in PC Assembly & Maintenance	8,400
5	Certified Graphics Designer	8,400
6	Certified Audio Visual Designer	8,400
7	Certified course in Web Designing	8,400
8	Course on Programming languages like C, C++, Java, C#, Oracle	8,400
9	Certificate course in ITeS & Soft Skills	22,050
10	Diploma in Installation & Repair of Consumer Electronics Products	15,000
11	Certificate Course in Financial Accounting using Tally	9,000
12	Certificate course in Mobile Repair & Maintenance	8,400
13	Certificate course in Information Security & Cyber Law	8,400
14	Repair & Maintenance of ECG and ICCU Equipment	13,650
15	Repair & Maintenance of Power supply, Inverter & UPS	13,650
16	Assembly & Maintenance of Personal Computer	15,000
17	Advance Diploma in Computer Application Accounting & Publishing	16,000
18	Advanced Diploma in .Net Technologies	20,000
19	Certificate course in Cyber Forensic	25,000
20	Certified Android Apps Developer	15,000
21	Certified 2D Animator	8,400
22	Certified Multimedia Developer	20,000

GST is applicable in all the above courses. The current rate of GST is 18% and is subject to change as per Central Govt. notification.

Other Short Term Courses will be charged according to the content and duration of the course. These Short Term Courses can be commenced any time with the minimum number of intake capacity.

# 11. ACADEMIC CURRICULUM FOR BCA

BCA course has been in progress and in high demand since its launch in July 2007 academic. It is a degree course in computer applications affiliated to Nagaland University. Duration of the course is 3 years. Admission to the course takes place during May/June every year. Admission notice is published in the local newspapers of Nagaland and other national newspapers about 2 months prior to the commencement of the course.

**Objective:** The objective of the course is to provide training to the potential candidates for becoming a skilled Information Technology Graduate. BCA graduates have scope for employment as Programmers, System Analysts and Administrators etc.

**Recognition:** This course is designed, prepared and approved by Nagaland University. It is a three years degree course awarded by Nagaland University.

**Eligibility:** Scoring 50% marks (45% for SC/ST) in 10+2 exam with English at 10+2 level.

**Certificate Awarding Body:** Nagaland University

Intake: 60 seats for each session

**Selection Procedure/ Prerequisites:** Selection of candidate is strictly done on the basis of a written common entrance test conducted by NIELIT, Kohima.

# Syllabus & Scheme of Instruction:

#### **First Semester**

SI.	Paper	· Panar		Hours p Paper week		•	Credit
	Code		L	Р	O TO CALL		
1.	MAT:101	Mathematics 1	4	-	4		
2.	ENG:105	English paper I	2	-	2		
3.	ITA:103	IT Tools and Applications	4	-	4		
4.	PPC:104	Programming and Problem Solving Through C Language	4	-	4		
5.	BEL:105	Basic Electronics	4	-	4		
6.	ELL:106	Electronics lab I (Basic Electronic lab)	-	2	2		
7.	SWL:107	Software lab I i. IT Tools and Applications	-	2	2		
		ii. Programming in C	-	2	2		
		Total			24		

# **Second Semester**

SI.	Paper Paper		Hours pe Paper week		Credit
			L	Р	
1.	MAT:201	Mathematics II	4	-	4
2.	ENG:205	English Paper II	2	-	2
3.	DSC:203	Data Structure in C	4	-	4
4.	DEL:204	Digital Electronics	4	-	4
5.	ELL:205	Electronics lab II (Digital Electronic lab)	-	2	2
6.	SWL:206	Software lab II (Data Structure in C)	-	2	2
		Total			18

# **Third Semester**

SI.	Paper	Paper	Hours per week		Credit
	Code		L	Р	
1.	OSM:301	Operating System	4	-	4
2.	CON:302	Computer Oriented Numerical Methods	4	L-	4
3.	OOP:303	OOP in C++	4	-	4
4.	CMO:304	Computer Organization	4	-	4
5.	SWL:305	Software lab III (Computer Oriented Numerical Methods)	-	2	2
6.	SWL:306	Software lab IV (OOP in C++)	-	2	2
		Total			20

# **Fourth Semester**

SI.	Paper Paper		Hours we	-	Credit
Code			L	Р	
1.	DMS:401	Database Management System	4	-	4
2.	PPD:402	Professional Personality Development	4	-	4
3.	SAD:403	System Analysis and Design	4	-	4
4.	.NET:404	C# and ASP.NET	4	-	4
5.	SWL:405	Software lab V (C# and ASP.NET)	-	2	2
6.	SWL:406	Software lab VI (DBMS)	-	2	2
		Total			20

# Fifth Semester

SI.	Paper	Paner	Hours per week		Credit
	Code		L	Р	
1.	MAP:501	Microprocessor Architecture and programming	4	-	4
2.	SWE:502	Software Engineering	4	-	4
3.	CMG:503	Computer Graphics	4	-	4
4.	504 FMM:504 ECM:504 MBC:504	Elective:- (choose any one) Fundamentals of Multimedia E-Commerce Mobile computing	4	<u> </u>	4
5.	EVS: 401	Environment studies (Compulsory paper)	3	-	3
6.	SWL:505	Software Lab VII (Computer Graphics)	-	2	2
7.	7. ELL:506 Electronics lab III (Microprocessor Architecture and programming)		-	2	2
		Total			22

# **Sixth Semester**

SI.	Paper Paper		Hours per week		Credit
	Code		L	Р	
1. DCN:601 Data Communi Networks		Data Communications & Computer Networks	4	-	4
	602	Elective:- (choose any one)			
	NIS:602	Network and Information Security			
2.	TOC:602	Theory of Computation	4	-	4
۷.	DBS:602	Distributed System			
3.	3. BOM:603 Business Organization a Management		4	-	4
4.	604 PRO:604 Project		4	-	4
		Total			16

#### **Examination:**

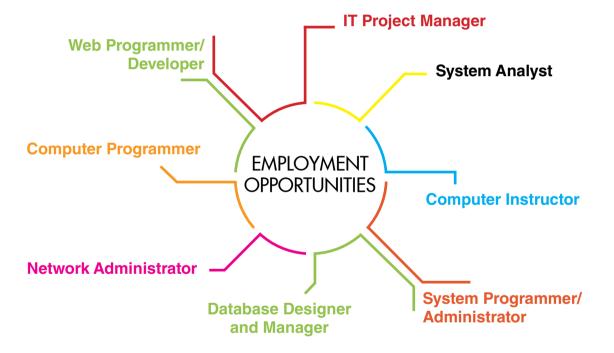
Examination of the course is conducted by Nagaland University on semester wise basis during May and November. Each paper has maximum marks of 100. The evaluation scheme of the papers is as follows:

**Theory**: 70 Marks Theory (External), 30 Marks (Internal Assessment)

Practical: 70 Marks practical (External), 30 Marks (Internal

Assessment)

## **Employment Opportunities:**



# 12. ACADEMIC CURRICULUM FOR DOEACC 'O' LEVEL

DOEACC 'O' Level Course is a foundation course of NIELIT in the field of Information Technology. The duration of the course is 1 year (2 semesters of 6 months each). The next level IT course of NIELIT is DOEACC 'A' Level which is equivalent to Advanced Diploma course in Computer Application. The course commences in the month of January and July every year. Admission notice is published in the local dailies about 1 month prior to commencement of the classes.

**Objective:** The objective of the course is to impart required knowledge and skills in I.T. and prepare the candidates for NIELIT examination.

**Recognition:** Recognition has been given by the Government of India to the DOEACC 'O' Level examination conducted by NIELIT as equivalent to Foundation Course in IT for the purpose of employment to the posts and services under Central Government.

Eligibility: 10+2 passed or ITI Certificate passed (one year after class 10).

**Certificate Awarding Body: NIELIT** 

Intake: 20 seats for each session

**Selection Procedure:** Selection of candidate is based on an entrance test conducted by NIELIT, Kohima.

# Syllabus:

Paper Code	Paper Name	
First Semester		
M1-R4	IT Tools and Business Systems	
M2-R4	Internet Technology and Web Design	
Second Semester		
M3-R4	Programming and Problem Solving through 'C' language	
M4.1-R4	Application of .NET Technology	
M4.2-R4	Introduction to Multimedia	
# One Paper has to be cl	nosen from M4.1-R4 &M4.2-R4	
Practical Papers &	Project	
PR-1	Practical based on the theory papers of the syllabus	
PJ	Project Work	

## **Project Work:**

Project Work under the NIELIT Scheme is an integral part of the curriculum to qualify for a certificate. after completion of 2nd semester, a specific single project is carried out whereby marks are not assigned or allocated. But candidates are required to implement and clear the project successfully. The project is time bound. The head of the Institute will submit a project completion certificate to NIELIT in the prescribed format for the purpose of issuing pass certificate to the students who have cleared all the papers and completed their project work.

#### **Examination:**

# 1. Theory Examinations:

DOEACC "O" Level theory examination is conducted twice a year (in the month of January and July) by NIELIT, New Delhi. Examination forms must be submitted online through NIELIT website. There is a number of examination centres all over India available/provided for, while collecting exam forms. Students can choose one of the examination centres according to their convenience.

Full mark of each paper is 100 and exam duration is 3 hours. Examination fee for each theory paper is ₹750/- and processing fee is ₹100/-.

#### 2. Practical Examinations:

There is one practical paper for DOEACC "O" Level Course. The criterion for appearing the practical examination is that the candidate must have appeared or is appearing all the theory papers. Practical Examination is conducted at the Institute under the supervision of NIELIT, New Delhi. Students provide the option for appearing in practical examination while filling up exam form with payment of additional practical examination fee of ₹500/-. Duration of each practical examination is 3 hours. Important dates regarding the examination are as follows:

Activity	Jan Exams	July Exams
Request for application forms at N	NIELIT, Kohima:	
i) Commencement date	1 <sup>st</sup> September	1st March
ii) Closing date	15 <sup>th</sup> October	15 <sup>th</sup> April
Closing date for submission of	filled forms at NIELIT, K	ohima:
i) Without late fee	15 <sup>th</sup> October	15 <sup>th</sup> April
ii) With late fee	30 <sup>th</sup> October	30 <sup>th</sup> April
Closing date for direct submiss	sion of form to NIELIT, N	ew Delhi:
i) Without late fee	31st October	30 <sup>th</sup> April
ii) With late fee	10 <sup>th</sup> November	10 <sup>th</sup> May
Commencement of Examination:	2 <sup>nd</sup> Saturday of January	2 <sup>nd</sup> Saturday of July

#### **Result of Examination:**

Result of DOEACC 'O' Level examination is published in the NIELIT website http://student.nielit.in normally after 2 months of completion of the exam. Results are also sent from the NIELIT Head Quarter to the candidates individually. The result is provided in the form of Grade. The mark scored in practical paper is not counted for calculating overall grade of the exam but, clearing practical paper is a necessary criterion for awarding the certificate.

Following is the Gradation system of the above DOEACC Course:

SI.	Marks Scored	Grade to be awarded
1	Below 50%	F (Failed)
2	50% - 54%	D
3	55% - 64%	С
4	65% - 74%	В
5	75% - 84%	Α
6	85% & above	S

Re-evaluation of marks can be requested within one month from the date of announcement of the result. The application along with requisite fee of ₹200/- per module/paper is sent directly to Examination Section, NIELIT, Plot No. 3, PSP Pocket, Industrial Area, Sector 8, Dwarka, New Delhi – 110077. If changes are made after correction, the result is sent to the candidates from the Head Quarter.

# **Employment Opportunities:**

Some of the employment opportunities available for the students after completion of DOEACC 'O' Level Course are given below:

1	Programmer Assistant	\	4	IT Lab Assistant	
2	Junior Programmer		5	Teaching Assistant	
3	Computer Operator				

# 13. ACADEMIC CURRICULUM FOR DOEACC 'A' LEVEL

DOEACC & Level Course is the next level of NIELIT IT Professional Course after qualifying 'O' Level. It is equivalent to the Advanced Diploma Course in Computer Application as recognized by Govt. of India for job purposes. Duration of the course is 1½ Year (for students on direct entry) and 1 Year for 'O' level qualifiers. The course starts in the month of January and July every year. Admission notice is published in the local dailies about 1 month prior to the commencement of the course.

## **Objective:**

The objective of the course is to impart required knowledge and skills in I.T. and prepare the candidates for NIELIT examination.

# **Recognition:**

Recognition has been given by the Government of India to DOEACC 'A' level examination conducted by the NIELIT as equivalent to Advanced Diploma Course in Computer Application for the purpose of employment to posts and services under the Central Government.

# **Eligibility:**

O level Qualifiers OR Any Graduate OR a Govt. recognized Polytechnic Engineering Diploma after class X /XII (No Concurrency).

# **Certificate Awarding Body: NIELIT**

#### Intake:

20 seats for each for each session

#### **Selection Procedure:**

Selection of candidate is purely on the basis of an entrance test conducted by NIELIT, Kohima.

## Syllabus:

Paper Code	Paper Name	
First Semester		
A1-R4	IT Tools and Business Systems	
A2-R4	Internet Technology and Web Design	
A3-R4	Programming and Problem Solving through 'C' language	
Second Semester		
A4-R4	Computer System Architecture	
A5-R4	Structured System Analysis & Design	
A6-R4	Data Structure through C++	
A7-R4	Introduction to DBMS	
Third Semester		
A8-R4	Basics of OS, Unix & Shell Programming	
A9-R4	Data Communication and Network Technologies	
A10.1-R4	Introduction to Object Oriented Programming Through JAVA	
A10.2-R4	Software Testing and Quality Management	
# One Paper has to be	chosen from A10.1-R4 & A10.2-R4	
Practical Papers &	Project	
PR-1	Practical -1(Based on A1, A2, A3, A4 Papers syllabus)	
PR-2	Practical -2(Based on A5,A6,A7,A8,A9,A10 Papers Syllabus)	
PJ	Project Work	

# **Project Work:**

Project Work under the NIELIT Scheme is an integral part of the curriculum to qualify the course. After the completion of 2<sup>nd</sup> semester, one project carrying 100 marks is assigned to each student, to be carried out under the guidance and support of the faculty and management of the respective institute. The project report has to be submitted along with a fee of ₹ 500/- (in the form of Demand Draft in favour of NIELIT payable at New Delhi) and an enclosed certificate of authentication of the project to NIELIT, Plot No. 3, PSP Pocket, Industrial Area, Sector 8, Dwarka, New Delhi − 110077, only after the successful completion and clearance of a minimum of 5 theory papers. An expert nominated by NIELIT, as far

as possible, near the candidate's location, will conduct a Viva-voce on the project. Following are some important information for the Project Work:

# **Project Supervisor / Guide**

Guide for "A" Level should be under the guidance or mentor someone with credentials of DOEACC "B" level / MCA / B.Tech / equivalent / higher qualification and adequate experience (minimum 3 years) in the area chosen by the student for the Project. In the case of a candidate from an accredited institute, the institute concerned will render all help including the nomination of the Supervisor.

# Time Allotted for Submission of 'A' Level Project

A Level student can submit the project only after clearing 5 papers of the A Level Course. A level project would cover 350 man-hours approximately and carries a total of 100 marks (80% for the project evaluation and 20% for the vivavoce).

# **Preparation of the project Report:**

The following guidelines may be followed in preparing the Project Report:

Good quality, white executive bond paper A4 size should be used for typing and duplication. Care should be taken to avoid smudging while duplicating the copies.

Page Specification: (Written paper and source code)

Left margin 3.0 cms

Right margin 3.0 cms

Top margin 2.7 cms

Bottom margin 2.7 cms

Page numbers All text pages as well as Program source code listing

should be numbered at the bottom-center of the pages.

# **Submission of Project Report to NIELIT**

The student will submit his/her project report in the prescribed format along with requisite fee. The Project Report should include:

- 1. One hard copy of the Project Report.
- 2. Soft copy of the Project on Floppy / CD

3. The Project Report may be about 50 pages (excluding coding).

#### **FEES:**

A fee of ₹ 500/- (Rupees Five Hundred only) should be remitted to NIELIT by a demand draft in favour of NIELIT, payable at New Delhi.

#### **Examination:**

## 1. Theory Examinations:

DOEACC "A" Level theory examination is conducted twice in a year (in the month of January and July) by NIELIT, New Delhi. The list of examination centres, spread all over India will be available while collecting exam forms, out of which students can choose one of the centres according to their convenience.

Full mark for each paper is 100 and exam duration is 3 hours. Examination fee for each theory paper is ₹750/- and processing fee is ₹100/-.

#### 2. Practical Examinations:

Practical Examination for DOEACC "A" Level course will be conducted at the Institute itself under the supervision of NIELIT, New Delhi. Students need to provide the option for appearing in practical examination(s) while filling up exam forms with payment of additional practical examination fee of ₹500/- per paper. Duration of each practical examination is 3 hours.

DOEACC "A" Level Course has two practical papers viz. PR-1 & PR-2 of full mark 100 (including 20 marks for Viva Voce) each. PR-I will be based on A1-R4, A2-R4, A3-R4 & A4-R4 papers while PR-2 will be based on the remaining papers.

The eligibility criteria for appearing the practical papers of the course are as follows:

PR1: Need to have appeared A1-R4, A2-R4, A3-R4 & A4-R4 papers or appearing these papers along with PR1.

PR2: Need to have appeared A5-R4, A6-R4, A7-R4, A8-R4, A9-R4 and A10.1-R4/A10.2-R4 papers or appearing these papers along with PR2.

Important dates regarding the examination are as follows:

Activity	Jan Exams	July Exams				
Request for application form	s at NIELIT, Kohima:					
i) Commencement date	1st September	1st March				
ii) Closing date	15 <sup>th</sup> October	15 <sup>th</sup> April				
Closing date for submission of	Closing date for submission of filled forms at NIELIT, Kohima:					
i) Without late fee	15 <sup>th</sup> October	15 <sup>th</sup> April				
ii) With late fee	30 <sup>th</sup> October	30 <sup>th</sup> April				
Closing date for direct submi	ission of form to DOEACC,	New Delhi:				
i) Without late fee	31st October	30 <sup>th</sup> April				
ii) With late fee	10 <sup>th</sup> November	10 <sup>th</sup> May				
Commencement of Examination	2 <sup>nd</sup> Saturday of January	2 <sup>nd</sup> Saturday of July				

#### **Result of Examination:**

Results of DOEACC "A" Level examination is published in the NIELIT website http://student.nielit.in normally after two & half months of completion of the exam. Results are also sent from the NIELIT Headquarter to individual candidates. The result will be provided in the form of Grade. The marks scored in practical papers & project are not added to the overall grade of the exam but, clearing practical papers and successful completion of Project are necessary criteria for awarding the certificate.

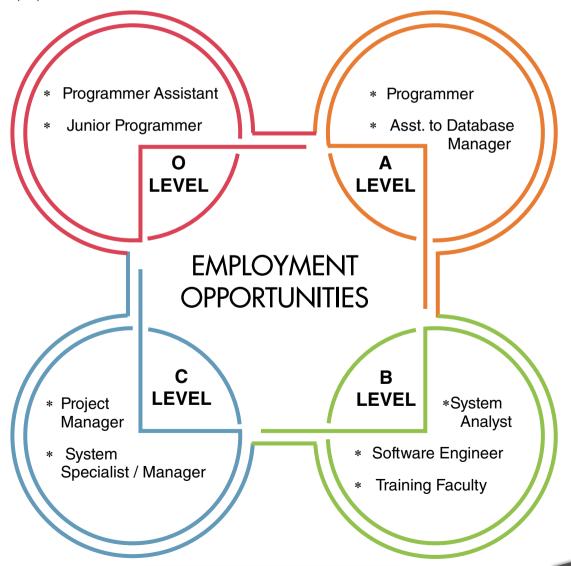
Following is the Gradation system of the above mentioned NIELIT Course:

S1.	Marks Scored	Grade to be awarded
1	Below 50%	F (Failed)
2	50% - 54%	D
3	55% - 64%	С
4	65% - 74%	В
5	75% - 84%	A
6	85% & above	S

Re-evaluation of marks can be requested within one month from the date of announcement of the result. The application along with requisite fee of ₹ 200/- per module/paper should be sent directly to Examination Section, NIELIT, Plot No. 3, PSP Pocket, Industrial Area, Sector 8, Dwarka, New Delhi – 110077. If changes are made after correction, the result is sent to the candidate from the Head Quarter.

# **Employment Opportunities:**

Some of the available employment opportunities for the students after completion of DOEACC "A" Level Course are Programmer, Asst. Database Manager, and Teaching Assistant etc. Following chart shows the employment opportunities in respect of all the NIELIT IT Professional Courses viz. DOEACC "O". "A" "B" and "C" Levels.



# 14. ACADEMIC CURRICULUM FOR DOEACC 'CHMO' LEVEL

This is a diploma course in Computer Hardware Maintenance. Duration of the course is six months starting in February and August every year. Admission notice of this course is also published in local dailies about 1 month prior to the commencement of course.

## **Objective:**

The objective of the course is to prepare candidates for NIELIT Hardware examinations by imparting required knowledge and skills.

# **Recognition:**

Recognition has been given by the Government of India to the "CHM-O" level examination conducted by the NIELIT as equivalent to the diploma course in Computer Hardware Maintenance for the purpose of employment to posts and services under the Central Government. This course is launched jointly by NIELIT and Manufacturer's Association for Information Technology (MAIT), an apex body representing IT hardware training, IT design/ R&D and associated services in India.

**Eligibility:** 10+2 passed or ITI Certificate passed (one year after class 10) in Electrical/Electronics/ Computers/Instrumentation Engineering.

**Certificate Awarding Body: NIELIT** 

Intake: 20 seats for every session.

Selection Procedure: Selection of a candidate is done on the basis of an entrance

test conducted by NIELIT, Kohima.

# Syllabus:

Paper Code	Paper Name
H1/HP1	PC Hardware and Components
H2/HP2	PC Architecture
H3/HP3	Advanced Network and Networking Peripherals
H4/HP4	Operating System, Software & Tools
H5/HP5	Personality Development
H6/HP6	Devices & Applications

## **Project Work:**

There is a mandatory project work for the course, despite carrying no marks.

#### **Examination:**

## 1. Theory Examinations:

The examination is conducted by NIELIT, (Aurangabad Centre) two times in a year - in the month of August & February every year. Examination form can be collected from NIELIT, Kohima on payment of ₹80/-.

Full marks of each paper are 100 and exam duration is 3 hours. Examination fee for each theory paper is ₹ 500/- plus GST. For the students of NIELIT, a formal announcement is made for the issue & submission of examination forms.

#### 2. Practical Examinations:

There are six practical papers for this course for each paper carrying 50 marks (10 marks each for Viva Voce) each. Practical Examination is conducted at NIELIT, Kohima for the trainees of NIELIT under the supervision of NIELIT.

Following are the tentative dates for the issue & submission of exam forms and commencement of the Examination.

Activity	Jan Exams	Aug. Exams					
Issue of Examination form at NIELIT, Kohima							
i) Commencement date ii) Closing date	15 <sup>th</sup> September 20 <sup>th</sup> November	15 <sup>th</sup> April 20 <sup>th</sup> May					
Closing date for submission of	filled forms at NIELIT, Kohin	na:					
i) Without late fee ii) With late fee	20 <sup>th</sup> November 5 <sup>th</sup> December	20 <sup>th</sup> May 5 <sup>th</sup> April					
Commencement of Examination	1st Saturday of February	1st Saturday of August					

#### **Result of Examination:**

Result of CHM-O Level examination is published in NIELIT Centre, Aurangabad website www.nielit.gov.in/aurangabad. For the students of NIELIT, Kohima, results can be enquired from the office. Results are declared in terms of grades like DOEACC 'O' & 'A' Level Courses.

# 15. ACADEMIC CURRICULUM FOR DOEACC 'CHMA' LEVEL

This is an Advanced Diploma course in Computer Hardware Maintenance and Networking. The course would be of six months duration, however, in continued govt. schemes the course can be offered in one year, (first three subjects in first semester & last four subjects in second semester).

## **Objective:**

The Objective of the CHM-A level is to train the candidates, who have qualified O level, with advancements in Computer hardware, networking and troubleshooting with advancements in Computer hardware, networking and troubleshooting. Being a modular course, only those who have qualified O level will be enrolled for A level.

# **Recognition:**

Recognition has been given by the Government of India to the "CHM-A" level examination conducted by the NIELIT as equivalent to Advanced Diploma Course in Computer Hardware Maintenance and Networking for the purpose of employment to posts and services under the Central Government. This course is launched jointly by NIELIT and Manufacturer's Association for Information Technology (MAIT), an apex body representing IT hardware training, IT design/R&D and associated services in India.

# **Eligibility:**

CHM-O Level Passed/ Diploma in Electronics/ Computers/ Electrical/ Instrumentation after 10 pass or undergoing 2nd year BSc. with Physics/ Electronics/ Computer or undergoing 2nd year B.E (Electrical/ Electronics/ Computer/ IT) and accredited 'A' Level course (may be concurrent).

## **Certificate Awarding Body: NIELIT**

Intake: 20 seats for every session.

## **Selection Procedure:**

Selection of a candidate is done on the basis of an entrance test conducted by NIELIT, Kohima. If the number of applicants is less, entrance test will not be held.

## Syllabus:

Paper Code	Paper Name		
A1/AP1	Advance PC Hardware and Networking Components		
A2/AP2 Data Communication and Computer Networks			
A3/AP3	Network Management and Administration		
A4/AP4	Linux Administration		
A5/AP5	Entrepreneurship Development		
A6/AP6	Project		
A7/AP7	Elective		
The candidate can cho	ose any one elective out of the two offered electives.		
A7.1	IT Security		
A7.2	Networking with Advanced components		

#### **Practical**

There shall be practical examinations for every CHM level course. The practical and their designated hours are defined in each course. After completing the course, the training institute would conduct the practical examination.

The duration of each practical examination shall be of three hours including viva-voce and maximum marks in each practical examination shall be 50. Candidates shall be awarded marks to be uploaded by the examiner soon after the examination. Every candidate has to pass in both Theory and Practical Examinations separately, where the passing marks are half of the maximum marks.

# **Project Work:**

On completion of the theory papers, DOEACC "CHM-A" curriculum requires every student to successfully carry out a mandatory project by applying their acquired technical knowledge and skills in solving a real problem. Candidate can submit the project only after clearing at least three papers and appearing in remaining papers in the next examination. Project should be so chosen that it would require approximately 100 man-hours & carries a total of 100 marks (80% for the project evaluation & 20% for the viva-voce). A fee of ₹ 1000/- shall be remitted to NIELIT Centre drawn in any nationalized bank for evaluation.

#### **Examination:**

## 1. Theory Examinations:

The theory examination is conducted by NIELIT, (Aurangabad Centre) two times in a year - in the month of August & February every year. Examination form can be collected from NIELIT, Kohima on payment of ₹80/- in cash.

Full mark of each paper is 100 and exam duration is 3 hours. Examination fee for each theory paper is ₹ 500/- inclusive of service tax.

#### 2. Practical Examinations:

There are four practical papers for the course carrying 100 marks each (20 marks each for Viva-Voce). Practical Examination is conducted at NIELIT, Kohima for the trainees of NIELIT under the supervision of NIELIT. The same form for appearing theory exam is used in applying for practical examination with additional practical exam fee of ₹ 500/- plus GST per paper. Following are the tentative dates for issue & submission of exam forms and commencement of the Examination:

Activity	Jan Exams	Aug. Exams						
Issue of Examination form at NIELIT, Kohima								
i) Commencement date	15 <sup>th</sup> October	15 <sup>th</sup> April						
ii) Closing date	20 <sup>th</sup> November	20 <sup>th</sup> May						
Closing date for submission	n of filled forms at NIE	LIT, Kohima:						
i) Without late fee	20 <sup>th</sup> November	20 <sup>th</sup> May						
ii) With late fee	5 <sup>th</sup> December	5 <sup>th</sup> April						
Commencement of Examination	1 <sup>st</sup> Saturday of February	1 <sup>st</sup> Saturday of August						

#### Result of Examination:

Result of CHM-A Level examination is published in NIELIT Centre, Aurangabad website www.nielit.gov.in/aurangabad. For the students of NIELIT, Kohima, results can be enquired from the office. Results are given in grade system like DOEACC 'O' & 'A' Level Courses. The marks scored in practical paper(s) are not added to the overall grade of the exam but, clearing practical paper(s) is a necessary criterion for awarding the certificate.

# 16. ACADEMIC CURRICULUM FOR MAT-O LEVEL

MAT-O Level Course is a foundation course of NIELIT in the field of Multimedia & Animation Technology. The duration of the course is 1 Year (2 semesters of 6 months each). The next level IT course of NIELIT is MAT-A Level which is equivalent to Advance Diploma course in Multimedia & Animation Technology. The course commences in the month of February and August every year. Admission notice is published in the local dailies about 1 month prior to commencement of the classes.

## **Objective:**

The Objective of the course is to impart basic knowledge to appreciate the basic Multimedia systems, tools and techniques, implement components of Multimedia productions, Web Designing and Animation production skills.

Eligibility: 10+2

Intake: 20 seats for each session

Certificate Awarding Body: NIELIT

Selection Procedure: Selection of candidate is based on an entrance test

conducted by NIELIT, Kohima.

# Syllabus:

Paper Code	Paper Name
First Semester	
MAT.O1.R0	Introduction to Information Technology
MAT.O2.R0	Introduction to Multimedia
Second Semester	
MAT.O3.R0	Multimedia Processing Techniques
MAT.O4.R0	Multimedia Design Principles & Applications
<b>Practical Papers &amp; Proje</b>	ct
PR-1	Practical in First Semester
PR-2	Practical in Second Semester
Mini Project	Project in First Semester
Major Project	Project in Second Semester

# **Project Work:**

Project Work under the NIELIT Scheme is an integral part of the curriculum to qualify for the certificate. There is one mini project at the end of the first semester

which should be carried out by the candidate in the center and evaluated internally. After the completion of 2<sup>nd</sup> semester, a major project must be carried out by the candidate internally or outside and submit to the Head Quarter or Nodal Center in the prescribed registration period. Mini Project carries 50 marks and Major Project carries 200 marks.

#### **Examination:**

## 1. Theory Examinations:

"MAT-O" Level theory examination is conducted twice a year (in the month of February and August) by NIELIT, New Delhi. Examination forms must be submitted online through NIELIT website. There is a number of examination centres all over India available/provided for, while collecting exam forms. Students can choose one of the examination centres according to their convenience.

Full mark of each paper is 100 and exam duration is 3 hours. Examination fee for each theory paper is ₹500/- and processing fee is ₹100/-.

#### 2. Practical Examinations:

There are two practical papers for "MAT-O" Level Course. Practical-1 is in First semester and carries 50 marks and Practical-2 is in Second semester and carries 100 marks. Practical Examination is conducted at the Institute under the supervision of NIELIT, New Delhi. Students provide the option for appearing in practical examination while filling up exam form with payment of additional practical examination fee of ₹ 300/-. Duration of each practical examination is 3 hours.

Fee charter is shown below:

SI. No.	Particulars	Fee (in ₹)
1.	Exam fee for each Theory Module	500
2.	Exam fee for each Practical Module	300
3.	Late submission of Exam Application form fee	100
4.	Improvement of Theory Module fee	500
5.	Mini Project fee	300
6.	Resubmission of Mini Project fee	300
7.	Major Project fee	500
8.	Resubmission of Major Project fee	500
9.	Issue of Duplicate Certificate fee	100
10.	Re-totaling of Answer Script fee	200
11.	Disclosure of Answer Script fee	500

#### **Result of Examination:**

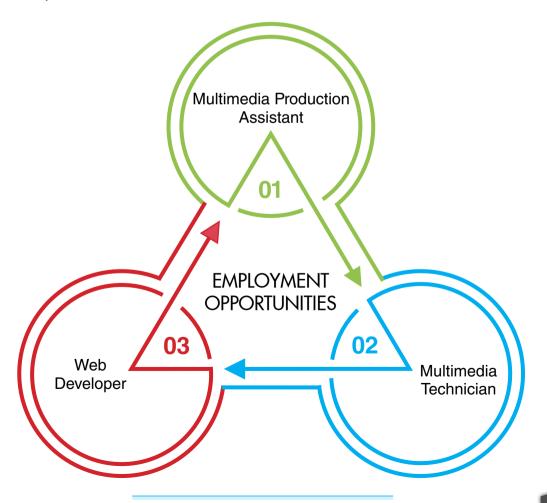
Result of 'MAT-O' Level examination is published in the NIELIT website http://student.nielit.in normally after 2 months of completion of the exam. Results are also sent from the NIELIT Head Quarter to the candidates individually. The result is provided in the form of Grade.

'MAT-O' Level course follows the grading system of DOEACC 'O' Level.

Re-evaluation of marks can be requested within one month from the date of announcement of the result. If changes are made after correction, the result is sent to the candidates from the Head Quarter.

## **Employment Opportunities:**

As per the recent market trend and the objective of the course as well as the projected skill sets of the "MAT-O" Level qualifiers, it is envisaged that the likely career options will be:



# 17. ACADEMIC CURRICULUM FOR DIPLOMA IN COMPUTER SCIENCE & ENGINEERING

Diploma in Computer Science & Engineering is a course under State Council of Technical Education, Nagaland under Directorate of Technical Education. Duration of the Course is 3 years. Admission to the course will be done during May/June every year. Admission notice is published in the local newspapers and some national newspapers about a month prior to the commencement of the course.

**Objective:** The Objective of the course is to provide training to the potential candidates to become an IT professional. Introduction to different new concepts for Engineering studies will be provided which will be a backbone for their career.

**Recognition:** This course is designed, prepared and approved by State Council of Technical Education, Nagaland.

**Eligibility:** 10 pass with 45% aggregate in Science & Maths and pass both Science and Maths separately.

Certificate Awarding Body: SCTE, Nagaland

Intake: 60 seats

**Selection Procedure:** Selection of candidate is done on the basis of a written entrance test conducted by NIELIT, Kohima.

Syllabus/Scheme of Instruction for Diploma in Computer Science & Engineering

#### Semester - I

SI.	Course	Name of Course	Teaching Scheme			Credit
	Code		L	Т	Р	
1	G1 01	Communication Skills-I	3	-	2	5
2	G1 02	Value and Ethics in Technical Education	-	1	1	2
3	G1 03	Engineering Mathematics-I	4	1	-	5
4	G1 04	Applied Physics	3	-	2	5
5	G1 05	Applied Chemistry	3	-	2	5
6	G2 02	Computer Fundamentals & Applications	2	-	4	6
		Total :				28

#### Semester - II

SI.	Course	Name of Course	Teaching Scheme			Credit
	Code		L	Т	Р	
1	G2 01	Communication Skills-II	3	1	-	4
2	G2 03	Engineering Drawing	2	-	6	8
3	G2 07	Engineering Mathematics-I I	4	1	-	5
4	CSE2 01	Fundamentals of Electrical & Electronics	3	-	2	5
5	CSE2 02	Computer Center Management	3	1	-	4
6	CSE4 06	Programming in C	2	-	3	5
Total :					31	

### Semester - III

SI.	Course	Name of Course	Ţ	Credit		
Code	# N.	L	Т	P		
1	G3 03	Engineering Economics	3	2	-	5
2	CSE4 02	Electronics Workshop	1	-	3	4
3	CSE4 03	Data Structure	3	1	2	6
4	CSE4 05	Operating System	4	1	-	5
5	CSE4 07	Network Essentials	3	2	1	6
6	CSE5 05	Object Oriented Programming in C++	2	1	3	6
Total :					32	

### Semester - IV

SI.	Course Code	Name of Course	Teaching Scheme			Credit
	Code		L	Т	Р	
1	G304	Marketing Management	3	2	-	5
2	CSE4 04	Computer Architecture	3	1	2	6
3	CSE4 08	Database Management System	4	1	2	7
4	CSE5 02	Linux O.S.	3	-	2	5
5	CSE5 07	Multimedia Technology & Application	3	-	3	6
6	CSE5 08	Programming in Visual Basic	3	1	2	6
		Total :				35

### Semester - V

SI. Course Code		Name of Course		Teaching Scheme			
	Code		L	Т	Р		
1	CSE4 01	Software Engineering	3	1	-	4	
2	CSE5 01	MP & Programming	3	1	2	6	
3	CSE5 03	Client Server Applications	3	1	2	6	
4	CSE5 04	System Software	3	1	2	6	
5	CSE5 06	Web Page Design	2	1	3	6	
		Total :				28	

### Semester - VI

SI.	Course Code	Name of Course	Teaching Scheme			Credit
			L	Р	Т	
1	G5 01	Entrepreneurship Development	4	2	-	6
2	CSE5 09	Project	2	-	8	10
Networking Technology						
3	CSE6 01N	Computer Networks	4	2	1	7
4	CSE6 02N	Network Installation & Management	4	-	2	6
5	CSE6 03N	Wireless and Mobile communication	4	2	1	7
6	IBT 01	Industrial Training of six week duration				10
Total:					46	

# 18. ACADEMIC CURRICULUM FOR SHORT TERM COURSES

# 18.1 Diploma in Computer Application & Networking (DCAN)

# **Objective the course:**

- To prepare students with latest knowledge in computer applications.
- To enable the students proficient in using Multimedia applications.
- To empower the students with the knowledge of Hardware & Networking.
- To help students acquire skills to setup their own enterprise.
- To make students employable in Government & Private sectors.

**Eligibility:** 10 with Knowledge of English language.

**Duration:** 360 hours

**Certificate Awarding Body: NIELIT** 

- Data entry operator
- Office Assistant
- Graphics Designer
- Hardware Technician

# 18.2 Course on Computer Concepts (CCC)

Introduction: This course is designed to aim at imparting a basic level IT Literacy programme for the common man. This programme has essentially been conceived with an idea of giving an opportunity to the common man to attain computer literacy thereby contributing to increased and speedy PC penetration in different walks of life. After completing the course the incumbent should be able to the use the computer for basic purposes of preparing his personnel/business letters, viewing information on internet (the web), receiving and sending mails, preparing his business presentations, preparing small databases etc. This helps the small business communities, housewives, etc. to maintain their small accounts using the computers and enjoy in the world of Information Technology. This course is, therefore, designed to be more practical oriented.

**Eligibility:** Knowledge of English language. The candidates can appear in the NIELIT CCC Examination through following three modes and the eligibility criteria for each mode are indicated against each:

- Candidates sponsored by NIELIT approved Institutes permitted to conduct CCC Course - irrespective of any educational qualifications
- Candidates sponsored by Government recognized Schools/Colleges having obtained an Unique Identity number from NIELIT for conducting CCC - irrespective of any educational qualifications; and
- Direct Applicants (without essentially undergoing the Accredited Course or without being sponsored by a Govt. recognised School/College)
   -irrespective of any educational qualification

**Duration:** 80 hours

NSQF Level: Level 3

**Certificate Awarding Body: NIELIT** 

An online examination of 90 minutes duration is held at NIELIT & its Extension Centre by NIELIT, New Delhi for awarding the pass certificate. The test comprises 100 Multiple Choice type or True/False type questions. The online examination will start on 1<sup>st</sup> Saturday (tentative) of every month. The examination fee is ₹ 590/- plus service tax. The important tentative schedule of the examination is as follow:-

Examination	Submission of Exam Form at NIELIT, Kohima	Examination	Submission of Exam Form at NIELIT, Kohima
January	November 1 to 15	July	May 1 to 15
February	December 1 to 15	August	June 1 to 15
March	January 1 to 15	September	July 1 to 15
April	February 1 to 15	October	August 1 to 15
May	March 1 to 15	November	September 1 to 15
June	April 1 to 15	December	October 1 to 15

Syllabus details and allotted training hours of the course are as follows:

SI.	Chapter	Theory Hrs.	Tutorials Hrs.	Practical Hrs.
1.	Introduction to Computer	2	1	4
2.	Introduction to GUI based OS	3	-	8
3.	Elements of Word Processing	3.5	2	9
4.	Spreadsheets	3.5	2	10
5.	Introduction to Internet, WWW & Web browser	6	_	8
6.	Communication & Collaboration	2	-	2
7.	Application of Presentation	4		8
8.	Application of Digital Financial Services	1	-	1
	Grand Total	25	5	50

# **18.3 Basic Computer Course**

Objective of the course: In step with effort to achieve the objective of achieving computer literacy in an inclusive manner, NIELIT has launched a new programme, "Basic Computer Course (BCC)." The objective of the course is to impart basic level computer appreciation programme with more emphasis on hands on training. Initially, the course was conceived as to boost the concept of introducing a course on computer fundamentals, especially for students, studying vocational courses at ITIs/ITCs. However, the course has gained popularity amongst many more categories. The BCC was launched in year 2011. The programme can equip a person to use the computers in day-to-day life for professional and personal use. After completing the course the incumbent will be computer literate and will be able to:

- Acquire confidence in using computer techniques available to users;
- Recognize the basic components of computers and terminology;
- Understand data, information and file management;
- Create documents using Word processor, Spreadsheet & Presentation Software;
- Understand computer networks, Internet;
- Browse the internet, content search, email and collaborate with peers;
- Use e-Governance applications;
- Use computer to improve existing skills and learn new skills.

**Eligibility:** The candidates can appear in the NIELIT BCC Examination through following modes:

- Candidates sponsored by NIELIT approved Institutes which are permitted to conduct BCC Course and having obtained e-provisional no. - irrespective of any educational qualifications;
- Direct Applicants -irrespective of any educational qualification;

**Duration:** 36 hours

**Certificate Awarding Body: NIELIT** 

# 18.4 Certificate Course in PC Assembly & Maintenance

**Objective of the course:** This course enables the students to understand the fundamentals of PC assembly.

**Learning outcomes:** The student will assemble / setup and upgrade personal computer systems; diagnose and isolate faulty components; optimize system performance and install / connect peripherals.

Eligibility: 10 passed

**Duration:** 80 hours

**NSQF Level :** Level 3

**Certificate Awarding Body: NIELIT** 

Admission will be on first-come, first-serve basis. Admission notices are published in the local dailies about 10 days prior to commencement of the course or after completion of the course.

An examination/test is held at the end of the training programme by NIELIT, Kohima and certificates are issued to the successful trainees.

- Computer Technician
- Technical Support (Desktop)



# 18.5 Certified Graphic Designer

**Objective of the course:** Introduction to graphic design using multimedia elements like Text, Images and Graphics with special emphasis on illustration and layout and optimization of content for printing, vector tools, Image editing etc.

**Learning outcomes:** On completion of the course the student will be able to take up digital graphics design jobs for the graphics print industry.

Eligibility: 10+2

**Duration:** 80 hours

**NSQF Level:** Level 5

**Certificate Awarding Body: NIELIT** 

Like other short term courses, admission to the course is on first-come, first-serve basis. Admission notice is published in the local dailies about 10 days prior to commencement of course.

An examination/test is held at the end of training programme by NIELIT, Kohima and certificates are issued to the successful trainees.

#### Job Roles:

- Junior graphic designers
- Desktop Publisher
- Assistant Web Designer
- · Packaging Designer
- Graphic Operator

# 18.6 Certified Audio Visual Designer

**Objective of the course:** The objective of this course is to let the student understand the fundamental concepts of digital audio & video editing. How to perform audio and video editing on a basic level and apply them in production activities.

**Learning outcomes:** This course will provide an opportunity for the students to create a variety of audio and video productions, allowing them to express personal creativity while developing the ability to conceptualize story ideas and effectively translate these ideas into video and audio production.

Eligibility: 10+2

**Duration:** 80 hours

**NSQF Level:** Level 5

**Certificate Awarding Body: NIELIT** 

- Audio Visual Designer
- Audio Engineer
- Studio Technician
- Production Assistant (Audio & Video)



# 18.7 Certified Course in Web Designing

**Objective of the course:** The course has been designed to provide the basic knowledge for design of the web page / site.

### **Learning outcomes:**

• A website is Published using application Server i.e. Tomcat/ IIS

Apply Java script Code to sites.

• Develop Motion Graphic with Flash.

• Apply proper layout and interactive website design.

Eligibility: Knowledge of Computer

**Duration:** 80 hours

NSQF Level: Level 3

**Certificate Awarding Body: NIELIT** 

Job Roles:

• Front End Web Designer

Web Master

# 18.8 Programming Language like C, C++, Java, VB, C# and Oracle

NIELIT Kohima offeres following programming courses:

**Certificate Awarding Body: NIELIT** 

SI. No	Name of the course	Eligibility	Duration
1	Certificate Course in Programming through C Language	Basic Knowledge of computer	80 Hrs
2	Certificate Course in Programming in C++ Basic knowledge of any programming Language		80 Hrs
3	Certificate Course in ASP. Net with C#	Undergoing /Graduation with knowledge of any programming Language	120 hrs
4	Certificate Course in Core Java	Basic Knowledge of Computers	80 hrs
5	Certificate Course in Oracle DBA	Basic Knowledge of DBMS	80 hrs



#### 18.9 Certificate course in ITeS & Soft Skills

## Objectives of the course:

 To be competent in communication skills and also to realize one's capabilities.

- To master the fundamentals of writing, speaking and listening traits, this
  will enable the students to communicate effectively on an interpersonal
  level.
- To give the concept and the essential elements of communication in order to bring about a transformation in the individual's professional world.
- To instill positive attitude, motivation and leadership qualities in the students.
- To develop ability to communicate clearly and correctly in English, on matters having relevance to-day-to-day business/social operations.
- To be proficient in basic computer concepts and use application softwares.

**Eligibility**: 10+2 with knowledge of English

**Duration:** 200 hours

## **Certificate Awarding Body: NIELIT**

Normally admission to the course is based on a personal interview conducted by NIELIT, Kohima. Admission notice is published in the local dailies of Nagaland about 10 days prior to commencement of course or after completion of training of a former batch.

An examination/test is conducted at the end of the training programme by NIELIT, Kohima and certificates are issued to the successful trainees. NIELIT, Kohima has been arranging campus/telephonic interviews for the trainees of the programme from time to time. As of date, through such interviews, over 100 trainees have been selected for working in various companies located in different cities of India.

Some of the companies who visited/arranged telephonic interviews for providing placement to our trainees are i) Wipro Spectramind, New Delhi ii) EXL, Noida iii) 24X7, Hyderabad & Bangalore iv) Convergys, Bangalore v) Navigant, Gurgaon vi) Wipro, Kolkata etc.

# 18.10 Diploma in Installation & Repair of Consumer Electronics Products

**Objective of the course:** This course aims at making the students introduced to the use of Tools and testing equipments to repair/service LCD-LED TV and Monitor. Implementation/maintenance of Cable TV and DTH Services. Use and functionality of all features of VCD-DVD Player and Home Theatre System. Servicing and repair FM Radio Cordless Phone-Hair Dryer Installation, Servicing & repair Induction Stove and Microwave Oven

**Learning Outcomes:** At the end of the course, the participant shall be able to identify the fault, repair & do maintenance of electronic products.

Eligibility: 10+2 pass or ITI

**Duration:** 350 hours

NSQF Level: Level 4

**Certificate Awarding Body: NIELIT** 

- Support Technician for Multi-National and National Desktop PCs Manufacturers
- Call Centre representative after sale support.



# 18.11 Certificate Course in Financial Accounting using Tally

**Objective of the course:** The objective of the course is to acquaint students with the accounting concept, tools and techniques influencing business organization

**Learning outcomes:** At the end of the course student should be able to use accounting and business terminology, explain the objective of financial reporting and related key accounting assumptions and principles.

**Eligibility:** 10 + 2 pass with knowledge in computer concepts.

**Duration:** 80 hours

**Certificate Awarding Body: NIELIT** 

Job Role: Account Assistant

# 18.12 Certificate Course in Mobile Repair and Maintenance

## Objectives of the course:

- To prepare students with latest knowledge in mobile technology.
- To empower the students with the knowledge of mobile components, troubleshooting and repairing.

Eligibility: 10

**Duration:** 80 hours

Certificate Awarding Body: NIELIT

Job Role: Mobile Service Technician



# 18.13 Certificate Course in Information Security & Cyber Law

**Objectives of the course:** The course is designed to make the participants capable of solving industry standard problems in information Security. After completing the course, the participants will be capable of doing the following:-

- They will be able to design countermeasures against common Information Security Attacks.
- They will be able to implement operating system hardening, Configure Firewall & IDS and Evaluate, implement Information security in a Network Environment.

Eligibility: 10+2

**Duration:** 120 hours

**Certificate Awarding Body: NIELIT** 

Job Roles:

System Security Analyst

Information Security Analyst

Network Analyst and Administrator



# 18.14 Repair & Maintenance of ECG and ICCU Equipment

**Objectives of the course:** It is a technician level course which will help in employment in the area of repair & maintenance of basic hospital equipment. During the course, the participants will learn the following:-

- Working with Tools, Test & Measuring Equipments.
- Demonstration of Testing & soldering of various Electrical & Electronic components.
- Use and Identify parts/components and, front panel controls of ECG Machine.
- Use & working with Pulse Oxy meter & NIBP Monitor
- Communicate with clients, colleagues clearly.
- Identify & Troubleshoot faults & follow Safety Procedures.

Eligibility: 10

**Duration:** 300 hours

**NSQF Level:** Level 3

**Certificate Awarding Body: NIELIT** 

- Technical Executive
- Jr. Technician
- Biomedical Technician

# 18.15 Repair & Maintenance of Power supply, Inverter & UPS

**Objective of the course:** The course is designed to make the participants acquire the skills for measurement of Electrical quantities, knowledge about Passive and Active components, acquiring knowledge about Digital Electronics, Understand the working principle of Stabilizers, Transformers, Inverter and UPS. Acquiring skills on installation procedure of UPS and Inverter. Troubleshooting of UPS and Inverter. Understanding working principles of Batteries, Acquiring skills in Diagnostics and Testing

**Eligibility:** 10 passed/ ITI

**Duration:** 350 hours

**NSQF Level:** Level 4

**Certificate Awarding Body: NIELIT** 

Job Roles:

Technical support of UPS/ Inverter

**UPS Repair Technician** 

Inverter Repair Technician

Assembly Operator of UPS/ Inverter



# 18. 16 Assembly and Maintenance of Personal Computer

Objective of the course: To understand the fundamentals of computer and enable the students to assemble, troubleshoot, install hardware, software and peripheral devices of computer

## Learning outcome:

- Demonstrate knowledge and concepts of computer fundamentals, its components and the booting process.
- The students will be able to set up BIOS, password, installation of Operating System and preventive maintenance
- Acquire skills for installation of different types of application software, Installation and Configuring antivirus and utility Software and setting of Dual Booting.
- System integration of different types of computers, such as PC, PCXT, PC -AT etc, Identify, install and troubleshoot power supply, storage devices, installation, repair and maintenance of different types of keyboard, mouse, monitors, etc and their repairing and maintenance
- Acquire skills for installation of different types of printers, troubleshooting in different types of UPS, their settings and maintenance/servicing and battery replacement of UPS.
- Assembling and dismantling of PCs front panel connection, maintenance and servicing of PCs like taking backup files and fine tuning the system, running of diagnostic tools and installation of virus protection program, etc

Eligibility: 10th pass/12th pass/ITI/polytechnic Diploma/Graduation

**Duration:** 240 hours

**NSQF Level:** Level 3

**Certificate Awarding Body: NIELIT** 

- Computer Technician
- Technical Support (Desktop)

# 18.17 Advance Diploma in Computer Application Accounting and Publishing

## **Objective of the course:**

To understand computer fundamentals, Operating System and office automation software

- To acquire core and advance skills to prepare financial accounting
- To acquire skills to prepare account books through accounting package
- To develop concept of desktop publishing softwares

## Learning outcome:

- Getting knowledge of basic concepts of Computer Fundamental and use of office automation software, thus identifying different concepts of Operating System and its functions
- Explain concepts of financial accounting, and prepare and practice financial accounting
- Familiarize with preparation of account books through accounting packages
- Execute skills on Page Maker, Photo Shop and Coral Draw

Eligibility: Knowledge of basic computer and internet concepts

**Duration:** 200 hours **NSQF Level:** Level 3

**Certificate Awarding Body: NIELIT** 

## Job Roles:

- Office Assistant
- Desktop Publisher
- Account Assistant
- Technical Assistant

# 18.18 Advanced Diploma in .Net Technologies

# **Objective of the Course:**

- To acquire skills to develop applications using C# and VB.Net
- Execution in VB.Net Programming, ASP.Net Programming

## Learning outcome

- The student will be able to develop applications in C#.Net Programming
- Learn to apply these languages (C#.Net, VB.Net) to develop server-side applications which make use of ADO.NET, ASP.NET, Web services, etc
- Design Project as per requirement and constraints, design test cases for testing the product and analyse feedback and use it to improve the coding & entire software quality

Eligibility: Diploma in Engineering, Bachelor's degree in Science/Technology/ Computers or any graduate course equivalent to these.

**Duration:** 420 hours

NSQF Level: Level 6

**Certificate Awarding Body: NIELIT** 

- Software Trainee
- Software Engineer
- System Analystst

# 18.19 Certificate Course in Cyber Forensic

## Objective of the course:

- To familiarize with Cyber Crime and Indian Cyber Laws and introduction to file system
- To familiarize with computer forensics and acquire knowledge on digital evidence and analysis and handling of digital evidence
- To acquire communication skill

### Learning outcome:

- The students will acquire knowledge on cybercrime, Indian IT (A) Act 2008 and computer forensics for windows and linux systems and antiforensics
- Skills will be acquired for Seizure and Imaging Digital Evidence
- Awareness with Data Storage devices and different Data Hiding techniques
- The student will be able to provide Conduct data breach and security incident investigations, Recover and examine data from computers and electronic storage devices by utilising knowledge gained during the training i.e. Windows Forensics, Linux Forensic, Anti-Computer Forensics, Recovery of Data, Digital Evidence, Seizing & Imaging of non volatile data
- Enhance communication skills learning to manage career, staff and professional relationships and preparing for interview

Eligibility: Graduate in Science/Engineering Stream pursuing

**Duration:** 500 hours

**NSQF Level:** Level 6

**Certificate Awarding Body: NIELIT** 

## **Job Roles:**

- Computer Forensics Technician
- **Junior Forensics Analyst**
- Computer Forensics Examiner

# 18.20 Certified Android Apps Developer

## **Objective of the Course:**

- To acquire skills to understand android, create applications and activities
- To acquire core skills to create user interface and intents and advance skills to understand broadcast receiver, adapters and internet
- To acquire skills to create and save files and to manage application with database

## Learning outcome:

- The student is able to recognize the concepts of android and create applications and activities of android
- The student is able to create user interfaces and intents, and learn the use of broadcast receivers, adapters, and the internet
- The student is able to create files, save files in android and preference, and manage application with database
- The student is able to acquire and demonstrate expert skills on android through project work

Eligibility: Graduate/undergraduate and knowledge of Java, Internet Concepts and Database.

**Duration:** 100 hours

**NSQF Level:** Level 5

**Certificate Awarding Body: NIELIT** 

Job Roles: Android Apps Developer

## 18.21 Certified 2D Animator

# **Objective of the Course:**

- Develop story line concept and outline conceptual ideas through storyboarding
- Develop multimedia and animated rich content using Photoshop and Flash

## Learning outcome:

- Demonstration of developed story line concept through storyboarding
- Demonstration of Image Editing
- Demonstrate working knowledge of animation principles and techniques
- Problem solving skills are developed and demonstrated through Project Work

Eligibility: 12th pass

**Duration:** 80 hours

**NSQF Level:** Level 5

**Certificate Awarding Body: NIELIT** 

#### **Job Roles:**

- 2D Animator
- 2D Visual Designer
- 2D Compositor

# 18.22 Certified Multimedia Developer

## **Objective of the Course:**

- To acquire knowledge on basics of Multimedia systems, Image Editing and Graphic Design Techniques
- To learn 2D/3D Animation Principles and Techniques
- To develop skill on video editing and special effects, Web Page Design and Development

## Learning outcome:

- The student is able to explain the basics of multimedia systems and its applications
- Develop knowledge of Image Editing & Graphic Design Techniques
- Explain audio editing techniques and demonstrate a working knowledge of audio editing techniques
- Explain 2D Animation principles & techniques and transformation tools and its implementation
- Develop Skills on video editing and special effects techniques
- Understand and practice 3D Animation Techniques and demonstrate a working knowledge of 3D Animation Techniques
- Explore knowledge on Web Page Design & Development
- Develop problem solving skills through Project Work

Eligibility: 12th pass

**Duration:** 200 hours

NSQF Level: Level 5

**Certificate Awarding Body: NIELIT** 

- Multimedia Developer
- Multimedia Designer
- Multimedia Programmer
- Multimedia Specialist

# 19. WORKING HOURS AND VACATION

NIELIT follows five working days a week i.e. Monday to Friday (Saturdays & Sundays are closed). The office hour for all working days is 09:00 am to 05:00 pm. In addition to these, the centre follows the Schedule of holidays as per the rules of the Government of India and CGEWCC, Nagaland. There is no specific vacation like summer or winter vacation but there is a break of about 20-30 days after semester/annual examination.

# 20. STUDENTS SCHOLARSHIP

Students of NIELIT, Kohima enjoy various scholarships extended by State Government, Central Government and NIELIT. Some of the scholarship schemes are:

i) Merit Scholarship Scheme for SC/ST/Physically Handicapped and Female candidates:

This scheme took effect from January 2003 Examinations. Candidates pursuing full time NIELIT Courses are offered Scholarship ranging from ₹ 4,000/- to ₹ 12,000/- depending upon the level of course. The Eligibility criteria for this scheme are:

- Clearing the papers in the first attempt for every semester.
- Income of the parents from all sources shall not be more than ₹ 1 lac p.a.

Trainees of NIELIT can apply for this scholarship, if found eligible within 1 month of the declaration of examination result through NIELIT, Kohima.

ii) Post-matric scholarship under Higher Education Department of state Govt.

Students of NIELIT, Kohima undergoing BCA or NIELIT long term Courses who belong to SC/ST category of Nagaland State can apply for the post-matric scholarship under Higher Education Department, Govt. of Nagaland.

# 21. EXTRA-CURRICULAR ACTIVITIES

The institute organizes various co-curricular activities like Sports Meet, Annual Day and other cultural & literary programs for the staff and students. In addition, the students participate in various inter-college activities.

# 22. NIELIT RURAL EXTENSION CENTRE, CHUCHUYIMLANG

The Extension Centre of NIELIT (National Institute of Electronics & Information Technology), Kohima was established at Chuchuyimlang in the year 2006 in collaboration with Nagaland Gandhi Ashram Chuchuyimlang under Mokokchung district, Nagaland. The institute prioritizes the vision to become a Centre of Excellence in the area of Electronics and Information Technology. It maintains a learner-centric environment with the objective of providing I.T. literacy among the rural youths in and around the district, and in empowering them to explore their creative potentials for technological advancements, at a moderate cost.



With a built-up space of about 4687 sq.ft., the institute has state of the art infrastructure distinctively featuring interactive smart classrooms, modern labs, 1 hardware lab, faculty cabins, library and an administrative room. This has been encouraging and facilitating the experienced faculty, staff and students alike to work synergistically. Since inception, NIELIT Chuchuyimlang has been offering both short term and long term courses and has so far trained more than 3000 students, many of them now placed in various government and private sectors.

The central government's approval of the NIELIT Chuchuyimlang Expansion Project has furthered the possibilities of maximizing our program utility, accommodating the increasing student enrollment and strengthening the outreach of services to the community. This project is expected to be completed by mid 2019 and sessions from July 2019 is expected to be started from the new campus.

# 23. OBJECTIVES OF THE EXTENSION CENTRE

- To provide quality technical education in IT and related disciplines.
- 2. To develop creative, competent and motivated professionals who are capable of critical thinking and independent life-long learning and being receptive to changing needs.
- 3. To create skilled manpower in the area of Computer Science and Information Technology and related disciplines for making available industry ready professionals.
- 4. To make a significant contribution to the socio-economic development of Nagaland.

# 24. HOW TO REACH THE EXTENSION CENTRE

National Institute of Electronics & Information Technology, Rural Extension Center is situated on NH-61 Amguri road, C h u c h u y i m l a n g, Mokokchung Nagaland. Chuchuyimlang is 29 kms away from Mokokchung Town, the nearest rail station is Amguri Assam and



nearest Airport is Jorhat, Assam which is 80 kms away.

Chuchuyimlang is one of the biggest Ao villages in Mokokchung and is promoted as a tourist village by the Department of Tourism, Govt. of Nagaland.

# 25. FACILITIES AT THE EXTENSION CENTRE

## 25.1 Class Rooms

The Institute has three class rooms with a capacity of 20 students each. White board and other educational aids such as projector are used in the class room for more interactive learning.

## 25.2 Software Lab / Multimedia Lab

This lab has 20 high end multimedia computers which are loaded with Windows 7/10 OS & Multimedia Software. It is used for conducting Multimedia course, Web Designing and other advanced programming language courses. An LED TV is provided to facilitate as projector for the faculty and students for conducting the classes. All the systems are connected through Intranet and are protected against viruses, worms and other online attacks through a centrally monitored Internet Security Suite.

# 25.3 Basic Programming Lab

There are 20 computers in this lab which are loaded with Windows XP and Windows 7 operating system. This lab is basically used for conducting short term courses like CCC and programming for 'O' and 'A' level courses.

## **25.4 Smart Class Room**

State-of-the-art, smart class provides perfect learning environment to the students by better use of technologies. Digital Interactive White Board and Visualizer helps student to understand more easily and comfortably.









# 25.5 PC Assembly & Maintenance Lab

This lab is used for conducting ICT & Resources Practical class and is used for short term course (PCAM). The lab has facilities for practicing Assembling and Deassembling of PC, maintenance, installation of OS, software, drivers and troubleshooting using different computer brands. It is equipped with basic electronic equipment like digital and analog multi-meter, LAN tester, soldering and



de-soldering pump and various trainers' kits. Training capacity is 10 students at a time.

# 25.6 Library

The well-stocked library is the most rewarding place for every student. The library collection consists of books, Periodicals, audio visuals and CD-ROM's. It has a collection of over 2000 volumes covering all areas and levels of study. The stock is updated as required and consists of multiple copies of course text together with supplementary and reference material. The library subscribes to



academic and professional journals and digital resources. Photocopy services for students are provided by the library in accordance with the copyright laws.

# 25.7 Power Supply & Backup

24 hours uninterrupted power supply is provided to the office building. There are three 5 KVA and one 10 KVA online UPS systems, one 15 KVA and one 40 KVA silent DG set fully engaged for power backup system supported by proper electrification works and safety mechanisms. One 25 KV dedicated step down is also installed mainly for the institute.



# 25.8 e-Learning Facilities

NIELIT Extension Centre is designed to be excellent in e-learning which is the catalyst that is changing the whole model of learning in this century. A learning management system (LMS) software called Moodle is made available in our intranet. The e-learning contents of all courses CCC, 'O' level and 'A' level are integrated with Moodle. Students as well as faculty can access the contents whenever required. The software is also used for conducting internal test, assignment for the students.

#### 25.9 Publication

NIELIT Extension Centre has a monthly publication of a newsletter called **ENTER**. Contributions from students as well as other readers on technological topics are being published. ENTER is being circulated in Mokokchung as well as couriered to student bodies and organizations of Longleng, Zunheboto & Tuensang district. The aim of ENTER is to provide technical information and an awareness of the Institute's activities to the rural people.

# 26. FACULTY& STAFF OF THE EXTENSION CENTRE

NIELIT Extension Centre has well qualified and experienced faculties and staff mentoring and assisting students on an individual capacity apart from classroom lectures and tutorials, and are proactively involved in both academic and student support activities. In addition faculties also undergo various trainings from time to time to update the knowledge/ skills with the latest technologies.



# 27. COURSES OFFERED ATTHE EXTENSION CENTRE

SI. No	Course	Eligibility	Duration/ Semester	Intake capacity
1	DOEACC 'O' Level	10+2 passed or 1 yr ITI passed after class 10	1 year ( 2 semesters)	20 per Batch
2	DOEACC A Level  O level qualifier or any graduat govt. Recognized polytechnic Engineering or 1 year diploma after X/XII (No concurrency)		1½ year (3 semesters)	20 per Batch
3	Diploma in Computer Application & 10 with Knowledge of English language		360 hours	20 per Batch
4	Course on Computer Concepts (CCC)	Knowledge of English language	80 hours	20 per Batch
5	Certificate course in PC Assembly & Maintenance	10 passed	80 hours	20 per Batch
6	Certified Graphics Designer	10+2	80 hours	20 per Batch
7	Certified Audio Visual Designer	10+2	80 hours	20 per Batch
8	Certified Course in web Designing	Knowledge of Computer	80 hours	10 per Batch
9	Course on Programming language like C, C++, Java, Visual Basic, C#, Oracle.	Knowledge of Computer	80 hours	10 per Batch

# 28. ACADEMIC CURRICULUM OF THE EXT. CENTRE

All academic curricula, admission procedures, fees, examination schedules, reservation, exemption of fees are same as NIELIT, Kohima and may kindly refer to previous pages of this prospectus.

Applicants seeking admission at NIELIT, Kohima must be sent/submitted to the following address:

National Institute of Electronics& Information Technology (NIELIT)

Meriema, New High Court Road, Post Box No. 733

Kohima, Nagaland-797 001

Applicants for seeking admission to NIELIT Extension Centre, Chuchuyimlang must be sent/submitted to the following address:

## **NIELIT Rural Extension Centre**

Nagaland Gandhi Ashram (NGA)

Chuchuyimlang, Mokokchung District-798614



Plot No. 3, PSP Pocket, Industrial Area, Sector 8. Dwarka, New Delhi - 110077.

Tel: 011 2530 8300

Website: http://nielit.gov.in

f /NIELITIndia @NIELITIndia



# **NIELIT Kohima**

Meriema, New High Court Road, Post Box No. 733

Kohima, Nagaland - 797001

Tel: 9436215243

Email: kohima@nielit.gov.in

Website: http://nielit.gov.in/kohima/ f /KHM.NIELIT > @KHM\_NIELIT

## **NIELIT Rural Extension Centre**

Nagaland Gandhi Ashram Chuchuyimlang, Mokokchung Nagaland - 798614

Tel: 0369 2261357

Email: chuchuyimlang@nielit.gov.in

Website: http://nielit.gov.in/chuchuyimlang/

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