Knowledge is all Ambrosia

CERTIFICATE COURSE IN

GREEN COMPUTING

ABOUT US

Hindi Vidya Prachar Samiti was incepted on the auspicious day of Shri Krishna Janmashtami, 15th August 1938. A brain child of a visionary Late Shri Nandkishore Singh Jairamji, samiti was established with the objectives of catering to the educational needs of the Hindi speaking community. Ramniranjan Jhunjhunwala College came into existence in 1963, enabling a larger section of the society to take advantage of the facilities provided for higher education.

From 1999-2000 the College has added a number of self-financing courses like B.M.S., B.B.I., B.Sc. in Computer Science, Information Technology, Biotechnology, M.Sc. in Computer Science, Biotechnology and Information Technology as well as add on courses, which further hone the special skills of the students.

The college has been reaccredited with 'A' Grade by NAAC in 2014 with a CGPA 3.50 and received the Best College Award (2007-2008) of the University of Mumbai. The College has been bestowed with IMC "Ramkrishna Bajaj Performance Excellence Trophy", 2010.

The Principal of the college was awarded "Best Teacher" by Government of Maharashtra in 2011.

Government of Maharashtra conferred the college with "JAAGAR JAANIVANCHA" (First in Mumbai Suburban- in 2013 and Second in Mumbai Suburban- in 2014) for safety of girls.
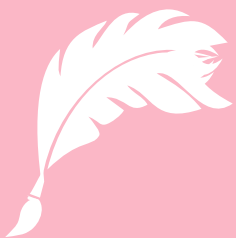
Course Code: RJITC03

Duration: 30 hours

Credits : 02

ABOUT COURSE

The course covers all the essential elements of technology and the latest domain and fundamentals of sustainability for the ICT industry. Only Green IT Professionals are able to sustain and maintain a reduction in energy consumption and in developing techniques to reduce the greenhouse gasses emissions attributed to the ICT usage.This course is designed to impart knowledge about sustainability for ICT.

COURSE OBJECTIVE

To develop Green IT Professionals who can assess, and develop strategies to reduce the carbon footprint and materials use of the ICT operations of an organization.

COURSE CONTENT

Module	Topics	Hours
I	**Green IT: An Overview** Environmental Concerns and Sustainable Development, Environmental Impacts of IT, Holistic Approach to Greening IT, Greening IT- Green PCs, Notebooks and Servers, Green Data Centres, Green Cloud Computing, Green Data Storage, Green Software, Green Networking and Communications	6
II	**Green Devices and Hardware** Life Cycle of a Device or Hardware: Design, Manufacturing, Packaging and Transportation, Use, Reuse, Recycle and Dispose **Green Data Storage**- Green Drives (Solid-State Drives (SSDs), RAID, MAID **Low Cost PC's**	6
III	**Green Cloud Computing and Environmental Sustainability** Introduction, what is Cloud Computing, Components of Cloud Computing, Cloud Computing Deployment Models, Features of Clouds Enabling Green Computing, Green Cloud Architecture, Case Study: IaaS Provider.	6
IV	**Go Green Initiatives in India: GIM (Green India Mission), Environmental (Protection) Act, Convention on Biological Diversity (CBD) treaty, Inching towards Renewable Energy** **Indian Inc's green initiatives to lower costs in the long run**: - reduced water consumption, reduced hazardous waste generation, dropped energy consumption. **Regulating Green IT: Laws, Standards and Protocols:** RoHS, WEEE. BAN, LEED, EPEAT	6
V	**Case Study: e.g.** ● Green Building ● Green Data Center Design ● Going Green at Airports ● Go Green Indian Railways	6

COURSE OUTCOME

- Gain knowledge about green economic practices in different energy sectors.
- Able to evaluate the economy of green energy generated from various energy sources
- Able to optimize the cost of green energy.
- Extend the understanding of green economics through various case study

MEDIUM OF INSTRUCTION

English

EVALUATION

Mode of Assessment	Maximum Marks (50)	Minimum Marks (20)
Exercise	20	8
Assignment	40	16
Project	40	16

100 MARKS   **PASSING 40**

WHO SHOULD DO IT?

Basic knowledge of computers and use of the internet