

# Int'l Green IT Valuer(IGITV) Syllabus



The Institute of Webcasting Broadcasting and Communication(IWBC)

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## Int'l Green IT Valuer(IGITV) Syllabus - Green Energy (IGITV01)

Following is a syllabus of Int'l Green IT Valuer(IGITV) Green Energy(IGITV01), that provides standard of theory based test. The applicant must comprehend contents of the module beforehand, as IGITV01 syllabus is based on the knowledge and technology that is included in green energy, the CORE module01.

## Int'l Green IT Valuer(IGITV) Syllabus Module Objective

IGITV01 applicant must understand and study the main concept of green energy through in-depth learning. Specifically, following contents must be understood.

- Definition of green energy/energy and resources/alternative energy
- Principle of power generation and electricity transit/energy law/energy function/chemical reaction and heat engine
- Fossil fuel, petroleum and coal
- Solar energy, origin/definition/use
- Wind energy, origin/definition/use
- Definition/characteristics/development of ocean energy
- Classification of cell/principle/Voltaic cell, fuel cell, domestic and international status and outlook
- Capacitor outline, application, material
- Characteristics of hydrogen energy, production, current state and utilization status
- Definition of waste energy/technology/pros and cons/principle and types
- Definition of geothermal energy/resource development technology/current state
- Principle of nuclear energy/characteristic/radiation/next generation Nuclear Power Plant system
- Definition and principle of Hydrate/form and formation principle/property and structure/distribution

## Int'l Green IT Valuer(IGITV) Syllabus – Information and Communication(IGITV02)

Following is a syllabus of Int'l Green IT Valuer Information and Communication (IGITV02), that provides standard of theory based test. The applicant must comprehend contents of the module beforehand, as IGITV02 syllabus is based on the knowledge and technology that is included in information and communication, the CORE module02.

### Information and Communication (IGITV02) Module Objective

IGITV02 applicant must understand and study the main concept of information and communication through in-depth learning. Specifically, following contents must be understood.

- Communication general and history/data communication and information communication
- Communication environment change
- Transmission medium / physical connection device/ MODEM
- Data encoding / transmission interface
- Digital datalization of digital data/convert into analogue, conversion into analogue of analogue data/digitalize
- Multiplexer(MUX)
- Communication mode and protocol
- Transmission control device/mode/flow control/detect transmission errors/error control/
- Data communication network structure/layering(OSI)
- Data communication network exchange technology/packet network standard/network interworking
- TCP-IP /LAN's/standard/bus type/ring type/LAN transmission and implementation
- Wireless LAN /Gigabyte ethernet/virtual LAN

- Power line modem
- Broadband communication network
- Development of mobile communication/mobile IP
- Internet broadcast/IPTV
- DMB/wibro
- GPS/ITS
- Sensor Network

## Int'l Green IT Valuer(IGITV) Syllabus – Green IT Ethics (IGITV03)

Following is a syllabus of Int'l Green IT Valuer Green IT Ethics (IGITV03), that provides standard of theory based test. The applicant must comprehend contents of the module beforehand, as IGITV03 syllabus is based on the knowledge and technology that is included in software, the CORE module04.

### Green IT Ethics (IGITV03) Module Objective

IGITV03 applicant must understand and study the main concept of Green IT Ethics through in-depth learning. Specifically, following contents must be understood.

Part 1. Information and communication ethics

- Development of information-oriented society
  - \*Concept, characteristic, and pros/cons of information-oriented society
  - \*Information-oriented society and information communication ethics related regulations
  - \*Concept and fundamental principle of information communication ethics
- Cyber culture
  - \*Cyber space culture and proper community culture formation
  - \*Freedom to express and responsibility in cyber space
- Adverse effect and its management

- \*Computer and health
- \*Internet and mobile phone addiction
- \*Distribution of unhealthy information and intrusion of intellectual property
- \*Personal information protection
- \*Cyber violence and crime

#### Part 2. Environment ethics

- Ecological crisis and environmental ethics
- Environment education to overcome ecological crisis
- Establishment of environment ethics education model
- Environment ethics and scientific technology