**List of topics for English exam (IT)**

**1. University Studies**

**Higher Education Today**

* Levels of HE and length of study in Belarus, the UK and the USA;
* University organisation in Belarus, the UK and the USA;
* Course of study in Belarus, the UK and the USA;
* Assignments and grades in Belarus, the UK and the USA;
* Cost of study in Belarus, the UK and the USA.

**My University**

* The mission of BSUIR and core areas of training;
* The University framework;
* The teaching stuff of BSUIR;
* Subjects being studied and the University curriculum;
* University facilities at the students’ disposal;
* BSUIR as a scientific organisation;
* The role of sport and extracurricular activities in the University life.

**Student Life**

* Personal traits and skills needed for university success;
* Ways to be a better student;
* My daily routine as a student;
* The main characteristics of academic life and my workload;
* The main characteristics of student social life and my extracurricular activities;
* How to reach the balance between academic and social life at university.

1. **Youth and Society**

**Youth Issues**

* The youth problems that American, British, Belarusian teenagers face;
* How to build a path to problem-solving;
* How to solve youth problems;
* Role of a family in a teen’s life;
* Why the problem shouldn’t be hidden.

**Tech Addiction**

* Types of tech and Internet addiction;
* Problems that can be caused by tech and Internet addictions;
* Reasons for becoming tech and Internet addicted;
* Positive and negative sides of the Internet and technology;
* How to avoid tech and Internet addiction.

**Generation Gap**

* Types of generations and their characteristics;
* How we can prevent the generation gap;
* What each generation can bring to the workplace;
* What barriers can affect communication;
* How we can manage different generations at the workplace;

**3. Career Path**

**Being a Successful Specialist**

* Factors of career success;
* Hard and soft skills of any successful specialist;
* Qualities of successful leaders;
* Typical functions of different department in the organisation;
* Principles of business ethics and business communication.

**My Speciality: IT Professional**

* Variety of jobs in the sphere of Information Technology;
* Personal qualities of any IT specialist;
* Typical responsibilities and skills for different IT department jobs;
* Future skills for IT specialists and their importance.

**Professional Development**

* Personal vs professional vs continuous professional development;
* Elements of CPD;
* Motivation as a key factor for professional development;
* Training and its forms;
* The benefits of CPD.

**4. ICT Concepts**

* Impact of ICT on individuals and communities in terms of social, economic, business, and professional development.
* Core characteristics of a modern computer.
* Nature of ICT, its application and core attributes.
* Phases of digital revolution and the main features of each.
* Difference between data and information, data representation.
* Definition and types of computers.
* Basic components of a computer.
* Input and output devices.
* Processing device.
* Definition and types of storage.
* Definition of sustainable IT, its core elements
* Threats of e-waste.
* Obstacles for tackling the problem of e-waste.
* Solutions to implement sustainability in IT.

1. **Software**

* Definition of software
* Categories of software.
* Types of software.
* Definition and types of operating systems.
* Definition of copyright and licence agreement.
* Type of software licences.
* Pros and cons of using open source and proprietary software.
* Software troubleshooting basics.
* Definition of software piracy.
* Types of software piracy.
* Dangers of software piracy.
* State of the issue globally nowadays.
* Preventive measures against using pirated software

**6. Computer Networks**

* Definition of a network and its main characteristics.
* Classification of networks based on size and scope.
* Communication channels and their main types.
* Network topology; network architecture.
* Network protocols.
* Cloud computing.
* The Internet and the Web.
* Types of the Internet protocols.
* Technologies and components of the WWW.
* Types of communication media: dial-up, DSL/ADSL, cable, 3G/4G
* Definition and applications of the IoT.
* IoT ecosystem.
* Benefits that IoT brings.
* Problems related to the IoT and their solutions.
* Future of the IoT.

**7. Information Systems**

* Definition of an information system, its goals, and examples of applications.
* Types of information systems and their main characteristics.
* SDLC and its core phases.
* Planning phase, its goal, and main activities.
* Analysis phase, its goal, and main activities.
* Blockchain technology
* Definition of the design phase; its purpose and activities.
* Hardware and software solutions.
* Definition of the implementation phase; its purpose and activities.
* Types of testing.
* Types of conversion
* Scope creep
* Goal, key activities, considerations of the maintenance phase.
* Types of modification during the maintenance phase.
* Quality of service and the metrics being used to measure it.
* Potential threats to information systems.
* Measures to protect data and information systems.
* Advantages of electronic government

1. **Computer Programming**

* Computer programming and the activities it involves.
* Programming paradigms.
* The types of programming languages.
* Object-oriented programming.
* Programming languages in demand.
* Artificial Intelligence, its usage, advantages and disadvantages.
* Machine Learning, Deep Learning, Big Data.
* The difference between Virtual Reality and Augmented Reality.
* Game programming, genres, components, programming language.
* Robotics, types of robots.
* Robotic system and its consistent components
* Robotics programming, its main approaches and languages.
* Robots’ applications, their benefits and threats.

**9. Digital Security**

* Digital security basics.
* Computer protection and maintenance.
* Types of password attacks.
* Password security, authentication
* Malware, types, ways to be infected.
* Practices to avoids computer infection;
* Antivirus software, techniques;
* Cyberwarfare attacks, cyber weapon
* Social Engineering, state of the issue.
* Methods of social engineering.
* Protection techniques against phishing, vishing, smishing.
* Encryption, its types, usage, importance.

**10. Job Hunting**

**Looking for a Job**

* the job that I want: the key characteristics a dream job should possess;
* the stages in the job application process;
* ways to research the market for job openings;
* my strengths and weaknesses, likes, dislikes, preferences, and interests in terms of professional behaviour;
* my profile: education, qualifications, transferable skills, experience;
* the strategy of a successful job-hunting process.

**Writing a CV / Résumé. Cover Letter**

* résumé writing rules: goal, structure, main sections, tips;
* cover letter: purpose, main features, challenges.

**Job Interview**

* pre-interview preparation tips;
* interview types: main characteristics and challenges;
* interview strategy: stages, common interview questions, do’s and don’ts;
* work values an employer is looking for in a candidate.