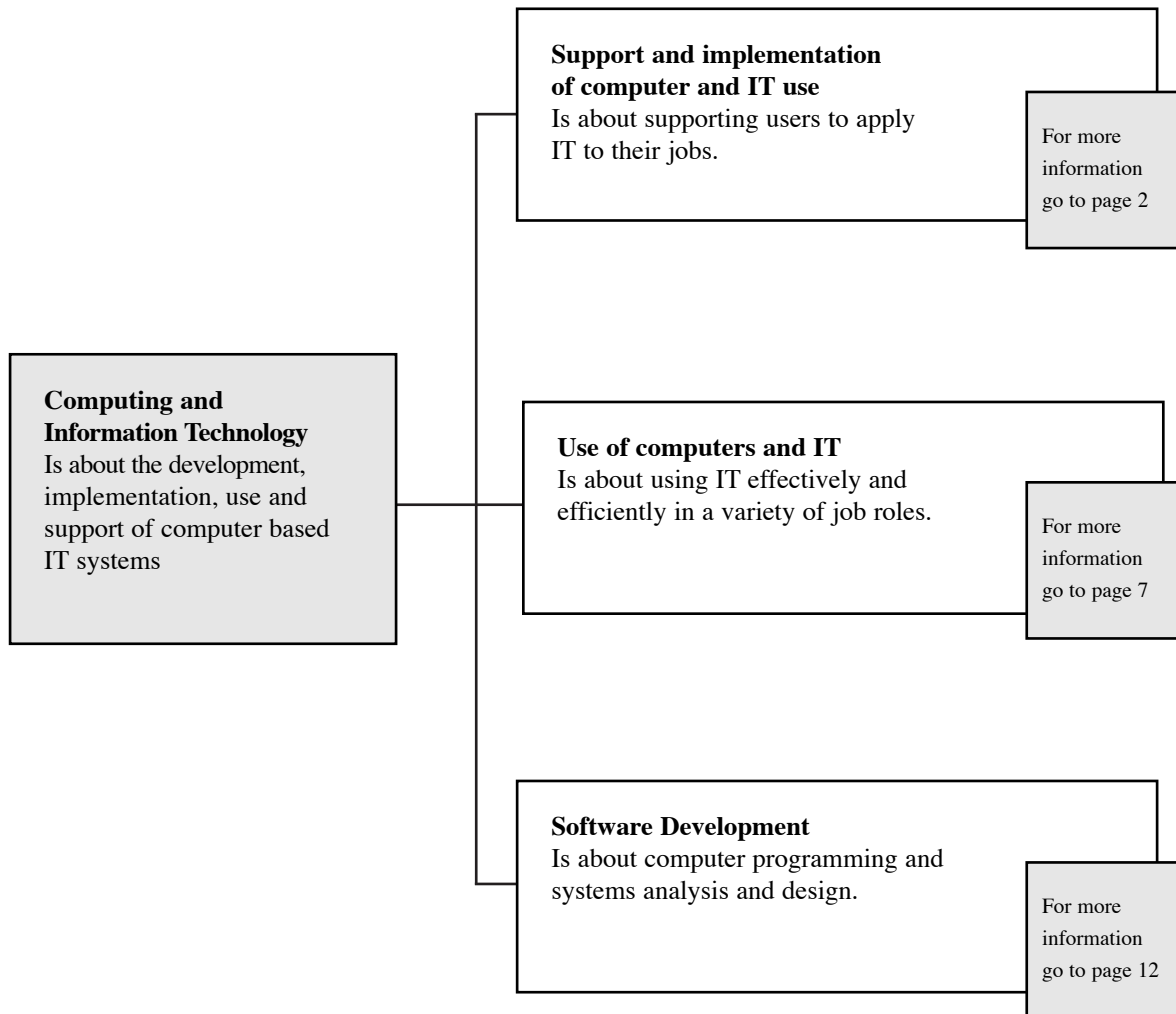


# Computing and Information Technology

## 1. career options

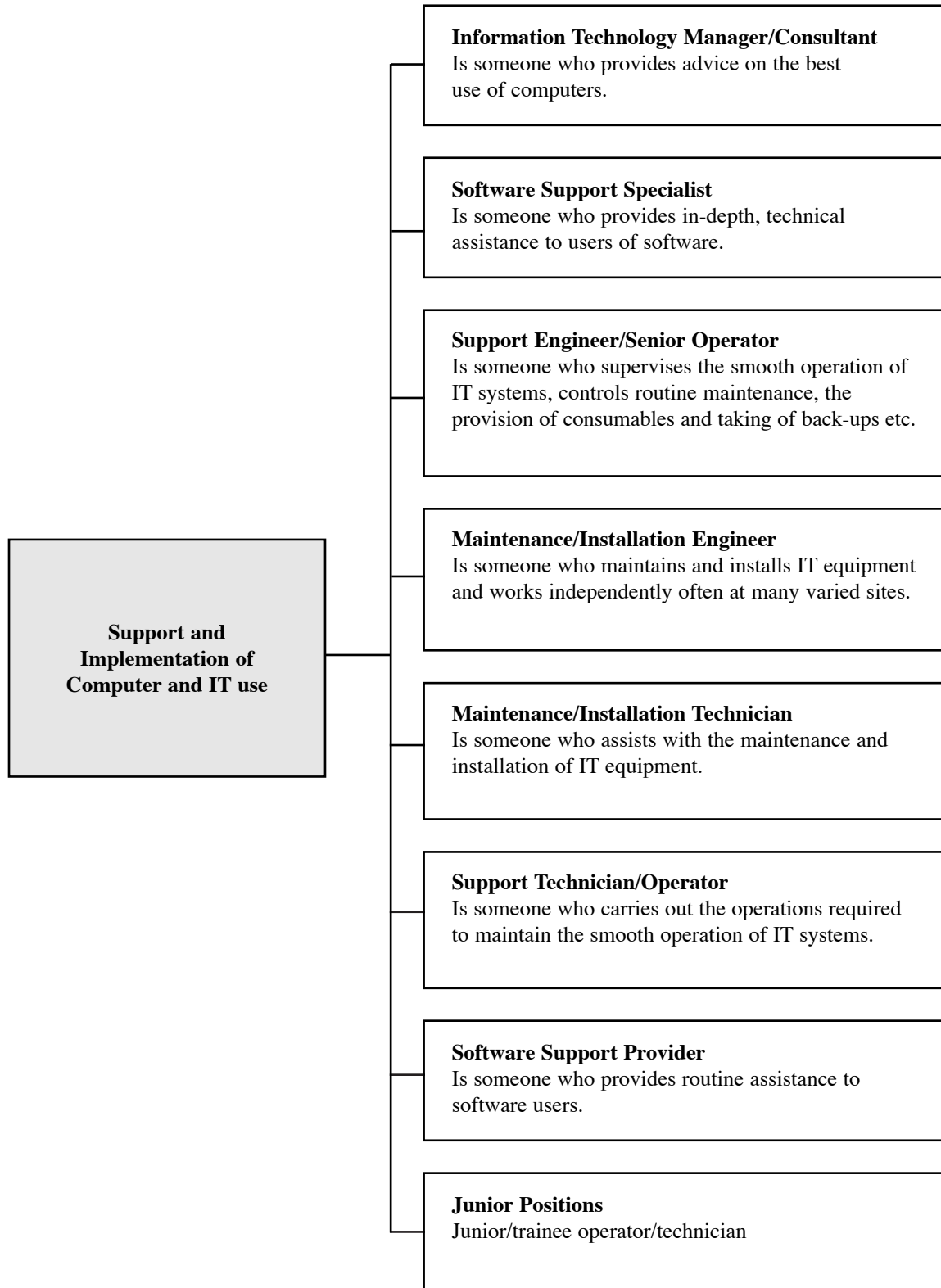


Other career areas related to Computing and Information Technology include:

1. Art and Design
3. Business Administration and Management
5. Communication and Media
5. Library and Information Sciences

# Support and Implementation of Computer and IT Use

## 2. jobs and careers



The job titles shown here are generic ones. Some organisations will use more specific titles such as Network Support Engineer.

**Terms** — Software — programmes and data  
Hardware — physical components of computer systems



# Support and Implementation of Computer and IT Use

## 4. qualifications

### **HND**

Applied Digital Media  
Computer and Network Support and Administration  
Computer Technology and Instrumentation  
Computing  
Computing: Information Technology  
Computing: Multimedia and Web Development  
Computing: Support  
Computing: Technical Support  
Digital Publishing and Web Design  
Digital Publishing with Graphic Design  
Inter–Networking  
Media Technology and Digital Production  
Multimedia Computing  
Multimedia Computing with Web Development

### **HNC**

Applied Digital Media  
Business Information Technology  
Computer and Network Support  
Computer Networks  
Computer Support and Maintenance  
Computing  
Computing: Information Technology  
Digital Publishing and Design  
Information Technology Support  
Microcomputer Servicing and Support  
Multimedia Computing  
Multimedia Computing with Web Development  
Network Support  
New Media Technology  
Web Development

### **PDA**

#### **Adv Diploma**

Computing

#### **Diploma**

Computing

#### **Adv Certificate**

Computer Networking

Networking

Networking (Microsoft NT4)

Networking (Microsoft Windows 2000)

Personal Computer Installation and Maintenance

#### **Certificate**

Computer Aided Draughting

Computer Support

Multimedia Computing

### **SGA**

#### **Higher**

Computing and Information Technology

#### **Int 2**

Computing and Information Technology

**GSVQ III**  
Information Technology

**GSVQ II**  
Information Technology

**National Course**  
**Adv Higher**  
Computing  
Information Systems  
**Higher**  
Computing  
Information Systems  
**Int 2**  
Computing  
Information Systems  
**Int 1**  
Computing Studies  
**Acc 3**  
Computing Cluster  
**Acc 2**  
Computing Cluster

**Standard Grade**  
Computing Studies

**SVQ 3**  
Implement Information Technology Solution  
Information Systems Acquisition  
Servicing Software: Support Centre or Field  
Support Users of Information Technology

**SVQ 2**  
Install Information Technology Products  
Operating Information Technology  
Servicing Software: Support Centre  
Support Users of Information Technology

**SVQ 1**  
Operating Information Technology

# Support and Implementation of Computer and IT Use

## 5. notes on entry to jobs and careers

### Entry routes

- ◆ **School leavers** — opportunities do exist for direct entry into employment for school leavers and this situation might be enhanced if the Information Technology Modern Apprenticeship scheme becomes well established and recognised by employers. However, lack of an FE qualification could limit the possibilities of career progression and entry via the FE route is recommended. Entry via HE is relatively uncommon although may be required in some specialised areas.
- ◆ **Adult entry** — there are few opportunities for direct employment for mature entrants. The normal route into employment would be via FE or other training (possibly leading to SVQs).

### SVQ access

The Information Technology SVQs are primarily intended for workplace use and for entry to an Information Technology Modern Apprenticeship, candidates must be employed. However, schemes are now becoming available from both colleges and other training providers leading to Information Technology SVQs which can be accessed by those not in employment.

Someone with a degree in Computing/Information Systems would normally need several years' experience in a more junior role before becoming an IT Manager/Consultant.

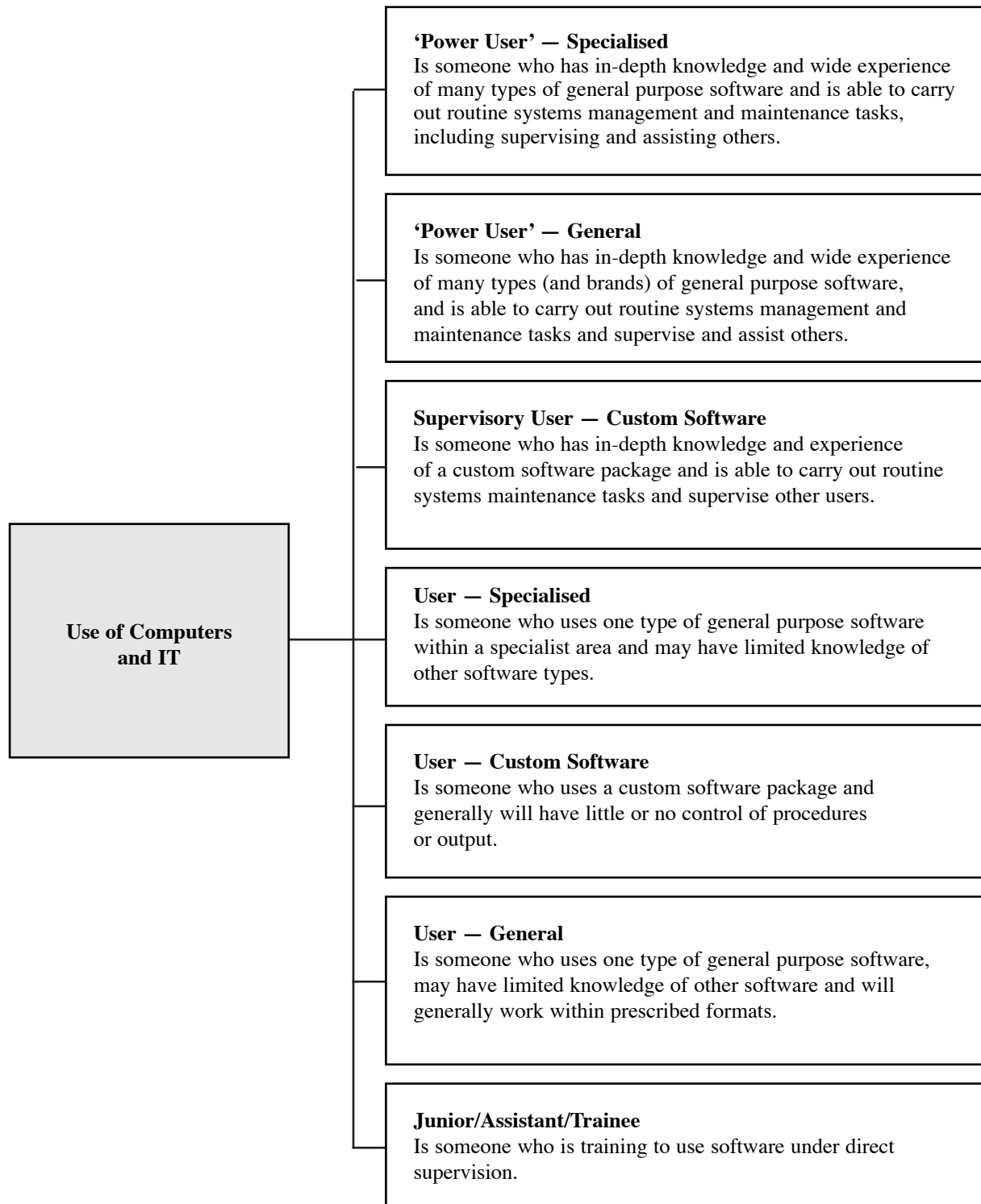
### Entry requirements

- ◆ Entry to an SGA ranges from no formal qualifications to four Standard Grades (English, Maths and Computing required for some courses).
- ◆ HNCs/HNDs usually require an appropriate SGA or one to three Highers (Maths and English preferred for some courses) and three or four Standard Grades including Maths and English.
- ◆ Degree courses usually require three or four Highers (English and Maths or Computing required for some courses) plus Standard Grade Maths and English (a Modern Language required for some courses); or appropriate HNC/HND.

**Note** — entry requirements vary between institutions. Check prospectuses before applying.

# Use of Computers and IT

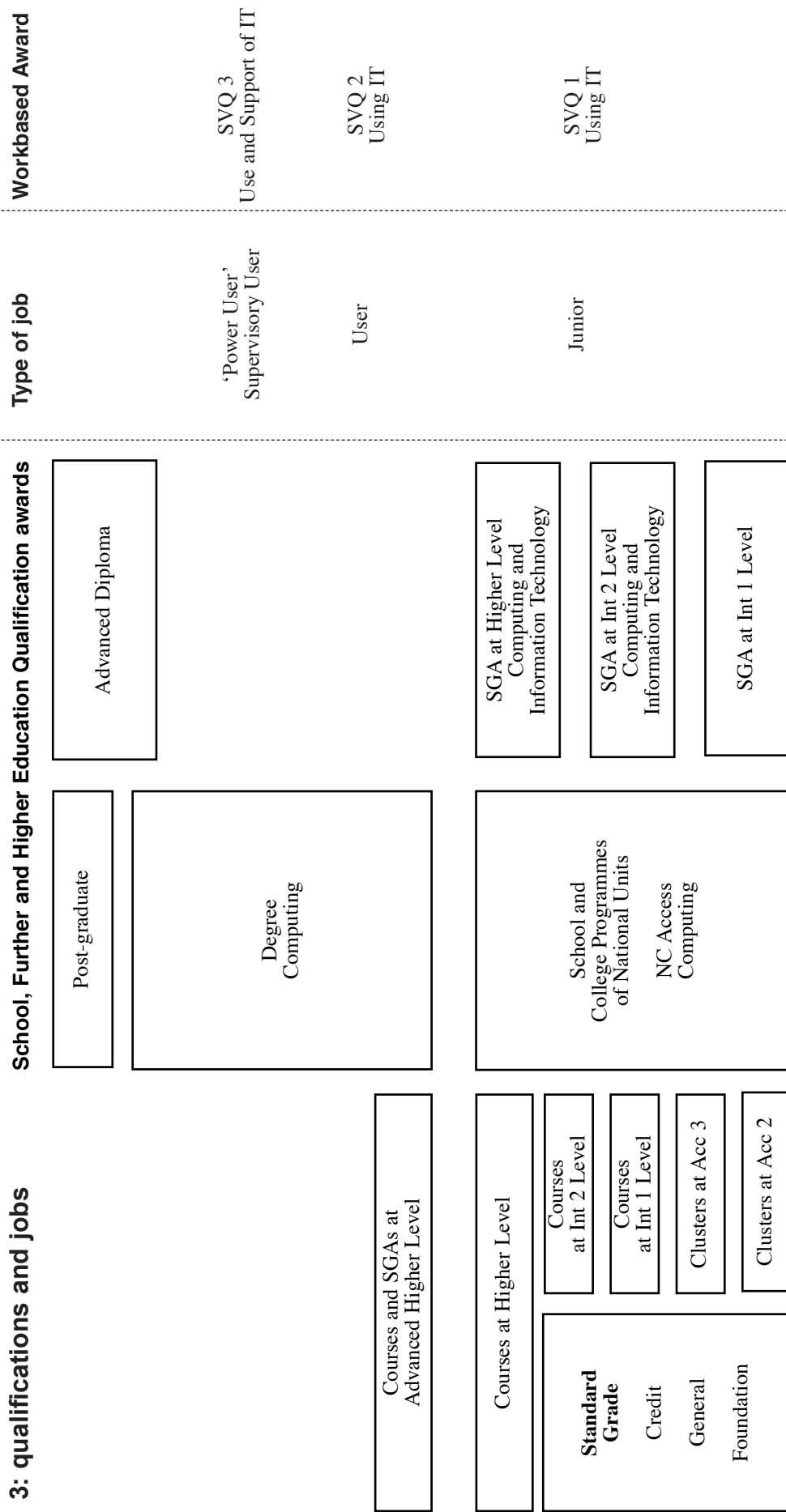
## 2. jobs and careers



### Notes:

- 1 The career structure shown above uses very generalised job titles and in most cases actual job titles will be more specific, eg **word processor** operator, **order entry** clerk.
- 2 A general purpose software package is intended for use in a range of settings and is not specific to one organisation (eg word processor, spreadsheets). Customer software is created to meet the specific requirements of a particular organisation or activity.

# Use of Computers and IT



This diagram outlines the main qualifications in the Use of Computers and IT area. A full list of all SQA qualifications is on the following pages. People can progress vertically from one qualification to another, eg from a Course at Int 1 to a Course at Int 2. In addition people can progress diagonally from one level of Standard Grade to a higher level of Course or Scottish Group Award (SGA), eg from Standard Grade at General level to Courses or SGAs at Int 2 level.

In this diagram, SVQs and PDAs in the Vocational sector are placed according to current practice and usage in illustrating the relationships and pathways between qualifications, jobs and careers.

# Use of Computers and IT

## 4. qualifications

### HND

Business Information Systems  
Business Information Technology  
Business Technology  
Computer Graphic Design and Production  
Information and Media Technology  
Information Systems  
Information Technology and Business Administration  
Information Technology for Business  
Interactive Multimedia (Design and Production)  
Imagery for Medical Illustration

### HNC

Business Information Systems  
Computer Applications  
Computer Graphic Design and Production  
Information Systems  
Information Systems and Applications  
Information Technology  
Information Technology Applications  
Information Technology and Business Administration  
Information Technology for Business  
Information Technology and Computer Systems  
Information Technology with Management Skills  
Interactive Multimedia (Design and Production)  
Multimedia Presentation  
New Media Technology

**PDA  
Certificate**  
Multimedia Authoring  
Office Applications (Microsoft Office)

**SGA  
Higher**  
Computing and Information Technology  
**Int 2**  
Computing and Information Technology

**GSVQ III**  
Information Technology

**GSVQ II**  
Information Technology

**National Course  
Adv Higher**  
Computing  
Information Systems  
**Higher**  
Computing  
Information Systems  
**Int 2**  
Computing  
Information Systems  
**Int 1**  
Computing Studies  
**Acc 3**  
Computing Cluster  
**Acc 2**  
Computing Cluster

**Standard Grade**  
Computing Studies

**SVQ 3**  
Use and Support of Information Technology

**SVQ 2**  
Using Information Technology

**SVQ 1**  
Using Information Technology

# Use of Computers and IT

## 5. notes on entry to jobs and careers

### Entry routes

- ◆ **School leavers** — The most common entry route is via FE with the HE route restricted to very specialised areas. FE qualifications tend to be combined ones involving both use of Information Technology and a specialist area such as Business or Design.
- ◆ **Direct entry into employment** — opportunities do exist for direct entry into employment for school leavers — generally in non-specialist areas.

A number of centres provide conversion courses often leading to a Professional Development Award for non-computing graduates wishing to pursue a career in use of computers and Information Technology

- ◆ **Adult entry** — there are few opportunities for direct employment for mature entrants. The normal route into employment would be via FE or other training (possibly leading to SVQs).

### SVQ access

The Information Technology SVQs are primarily intended for workplace use and for entry for an Information Technology Modern Apprenticeship candidates must be employed. However, schemes are now becoming available from both colleges and other training providers leading to Information Technology SVQs which can be accessed by those not in employment.

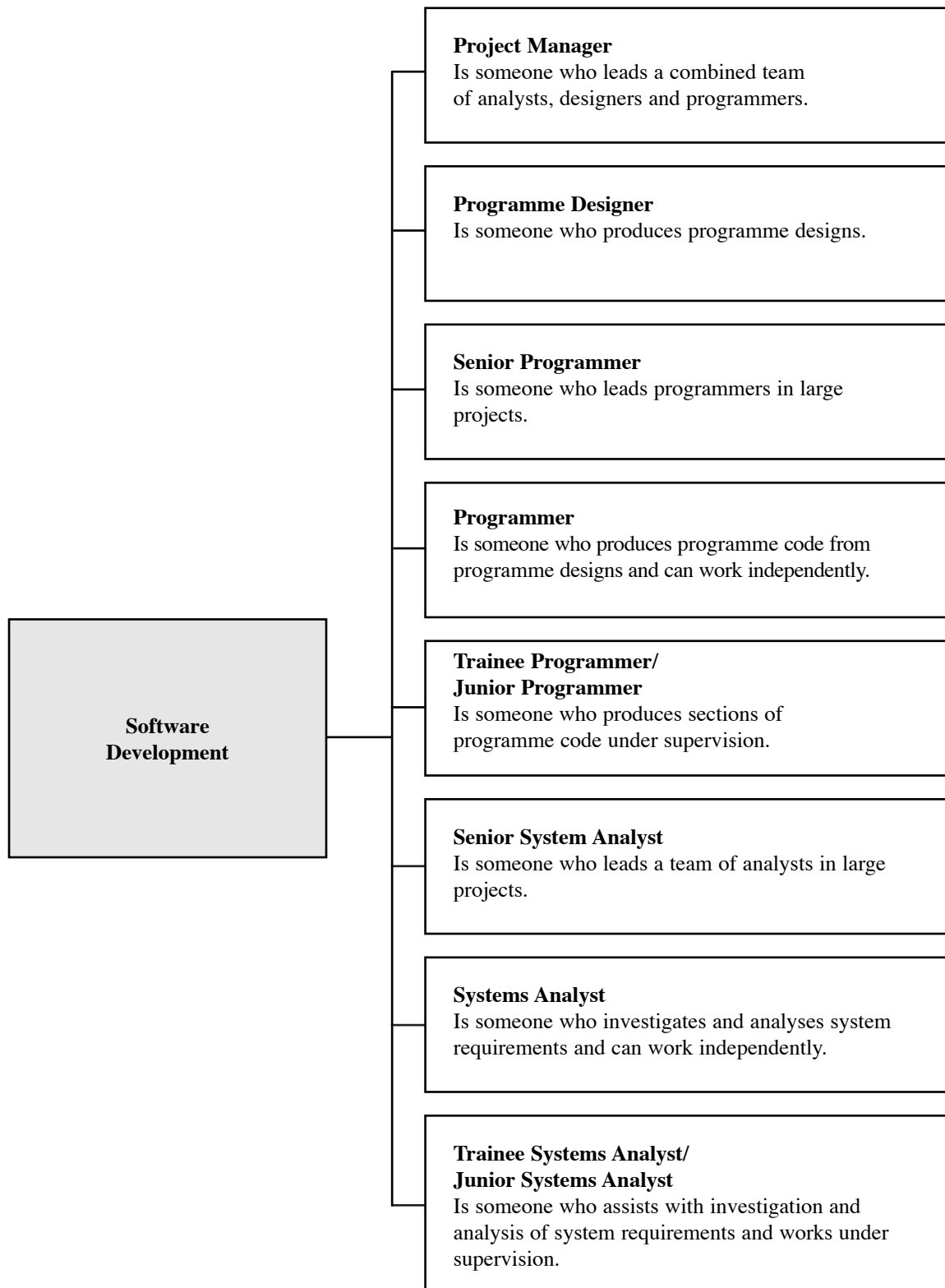
### Entry requirements

- ◆ Entry to an SGA ranges from no formal qualifications to four Standard Grades (English, Maths and Computing required for some courses).
- ◆ HNCs/HNDs usually require an appropriate SGA or one to three Highers (Maths and English preferred for some courses and Standard Grade including Maths and English).

**Note** — entry requirements vary between institutions. Check prospectuses before applying.

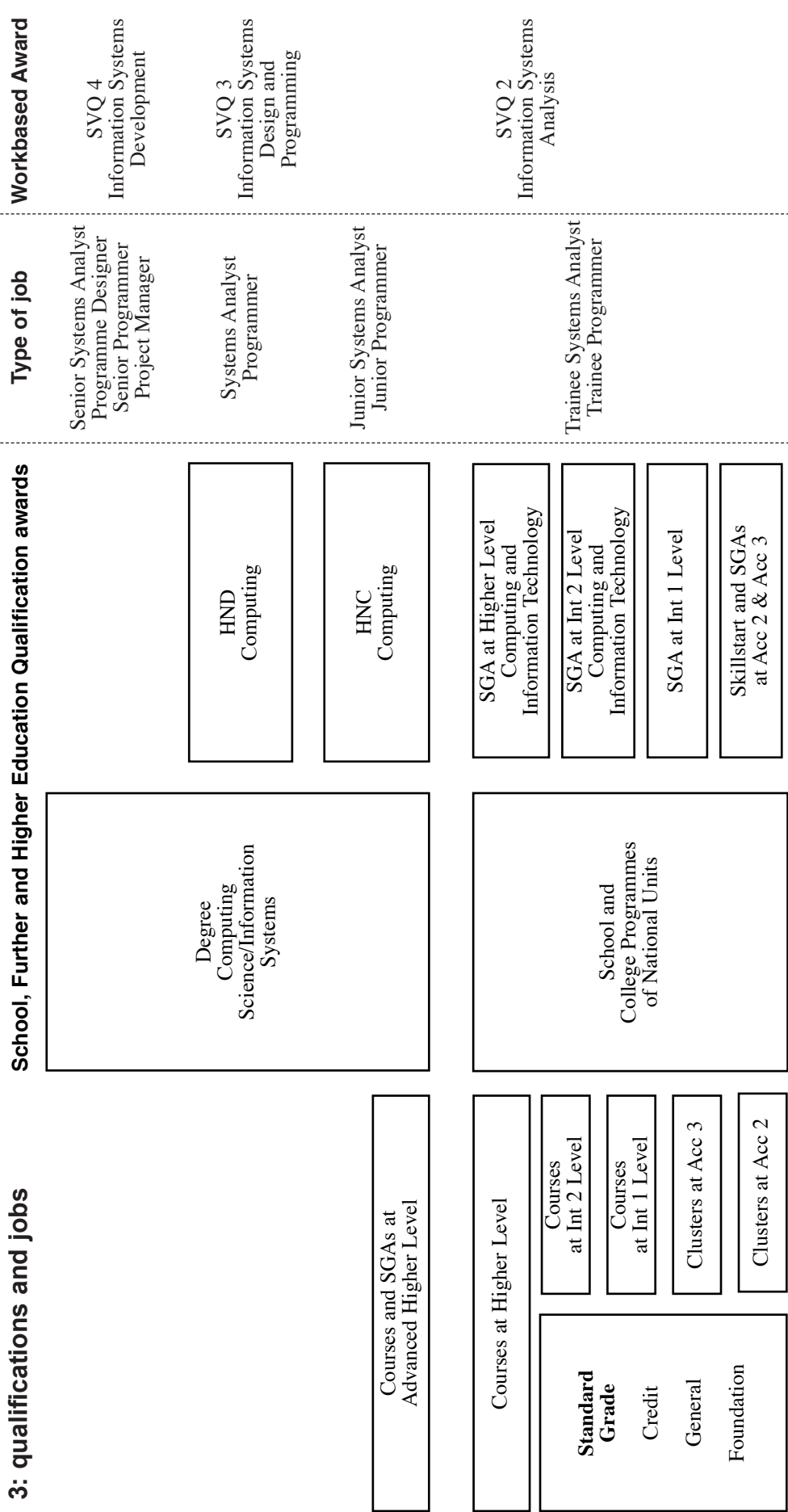
# Software Development

## 2. jobs and careers



- 1 The job titles and functions shown are based on the structure found within large, traditional software houses.
- 2 The generic job titles are frequently prefixed by a particular language or application area (eg **COBOL** programmer or **financial systems** analyst).

# Software Development



This diagram outlines the main qualifications in the Software Development area. A full list of all SQA qualifications is on the following pages. People can progress vertically from one qualification to another, eg from a Course at Int 1 to a Course at Int 2. In addition people can progress diagonally from one level of Standard Grade to a higher level of Course or Scottish Group Award (SGA), eg from Standard Grade at General level to Courses or SGAs at Int 2 level.

In this diagram, SVQs and PDAs in the Vocational sector are placed according to current practice and usage in illustrating the relationships and pathways between qualifications, jobs and careers.

# Software Development

## 4. qualifications

### **HND**

Computing  
Computing: Software Development  
e-business Management  
e-commerce (Business)  
e-commerce (Technology)  
Internet and Multimedia Design and Development  
Software Engineering

### **HNC**

Computing  
e-business  
e-commerce  
e-commerce technology  
Internet and Multimedia Design and Development  
Software Engineering

### **PDA**

#### **Adv Diploma**

Software Engineering

#### **Diploma**

Systems Analysis and Design

#### **Adv Certificate**

Software Development (Microsoft Visual Basic)  
Web Development for e-commerce  
Web Development for e-commerce (Microsoft Visual Basic)

#### **Certificate**

Software Development

### **SGA**

#### **Higher**

Computing and Information Technology

#### **Int 2**

Computing and Information Technology

### **GSVQ III**

Information Technology

### **GSVQ II**

Information Technology

### **National Course**

#### **Adv Higher**

Computing

#### **Higher**

Computing

#### **Int 2**

Computing

#### **Int 1**

Computing Studies

#### **Acc 3**

Computing Cluster

#### **Acc 1**

Computing Cluster

### **Standard Grade**

Computing Studies

**SVQ 4**

Information Systems Development

**SVQ 3**

Information Systems Analysis

Information Systems Design and Programming

**SVQ 2**

Information Systems Analysis

Software Creation

# Software Development

## 5. notes on entry to jobs and careers

- ◆ **School leavers** — the main entry route into software development is via HE/FE. There is an increasing trend for employers to ask for graduates, with FE programmes becoming increasingly important as an alternative route into HE. A number of HE/FE centres provide conversion courses (often leading to a Professional Development Award) for non-computing graduates wishing to follow a career in software development.

The HND in Computing and in Software Development may give exemption from part one of the Award of Incorporated Engineers made by the Engineering Council in association with the British Computer Society. Check detailed requirements with the centre.

- ◆ **Direct entry into employment** — there are only limited opportunities for direct entry into employment for school leavers although this situation might change if the Information Technology Modern Apprenticeship scheme becomes well established and recognised by employers.
- ◆ **Adult entry** — there are few opportunities for direct employment for mature entrants. The normal route into employment would be via FE or other training (possibly leading to SVQs).

### SVQ access

The Information Technology SVQs are primarily intended to be accessed via employment and for entry to an Information Technology Modern Apprenticeship candidates must be employed. However, schemes are now becoming available for both colleges and other training providers leading to Information Technology SVQs which can be accessed by those not in employment.

### Entry requirements

- ◆ Entry to an SGA ranges from no formal qualifications to four Standard Grades. Maths, English and Computing required for some courses.
- ◆ HNCs/HNDs usually require an appropriate SGA or one or two Highers (Maths and English useful) and Standard Grade English and Maths.
- ◆ Degree courses usually require three or four Highers including Maths and/or a Science or Computing. English or a Modern Language preferred from some courses, plus Standard Grade English or appropriate HNC/HND.

**Note** — entry requirements vary between institutions. Check prospectuses before applying.