MAKING KNOWLEDGE WORK

Introduction to SAINT

An introduction into what SAINT is and how to start using it

21 Jan 2008

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The SAINT team welcomes feedback on its documentation. Please email any comments on the content of this document to: *saint@bradford.ac.uk*

For other SAINT documentation please see: *http://www.brad.ac.uk/admin/SAINT/trainingdocs.html*

CONTENTS

INTRODUCTION

SAINT stands for **STUDENT ADMINISTRATION, INFORMATION, NAVIGATION AND TRACKING** and is the name for the University of Bradford project to implement the commercial package "**SITS Vision**".

The "SITS Vision" application is produced, supplied and maintained by Strategic Information technology Services Ltd., based in Hessle. The company was taken over recently by Tribal Technology.

You may hear the terms "SAINT" and "SITS" used interchangeably at Bradford to refer to the **SITS Vision system** (colleagues in other universities using the product may have their own, local, terminology).

WHAT IS IT USED FOR?

SAINT is used across the campus and in central administration to manage information on applicants/students/alumni . It replaced the previous "in-house" administrative system "ISIS"/"PROWESS" as well as a number of local databases, spreadsheets, etc.

The implementation of a single database for all student records has a number of advantages, including the elimination of duplicated information, easier sharing of information and skills, and improved data quality.

WHO USES IT?

Anyone who needs to access, report on, or update details of students and their courses. This includes academic and administrative staff in Schools as well as central administration and management. There are currently 4 profiles that a user may have – ranging from SAINT READ through to PROJECT TEAM - as a new user, your level of access will have been determined in conjunction with your role within the university.

There is also E-VISION which has been developed recently and allows 2nd year students and above to re-enrol online; Final Year students can deal with

graduation ceremony procedures and students can look up their agreed marks and change their addresses, telephone numbers etc.

INTERACTION WITH OTHER UNIVERSITY SYSTEMS

SAINT has interfaces to a number of other University applications, including Blackboard (interactive learning and teaching), Powersolve (financial accounts), OpenDoor (Human Resources), Room Service (Accommodation) and ModCat (Module Catalogue).

SYSTEM UPDATES

Upgrades for the system are supplied by SITS twice yearly and also we receive “sub-releases” or “Hotfixes”, which provide bug-fixes and minor enhancements.

DELIVERY

For Computer Centre-supported Departments, the software is delivered remotely to the user’s desktop via the Novell “ZENworks Application Launcher” – the same application that is used to provide Microsoft Office, etc. The first time the application is launched (or after an upgrade) it may take a few minutes to install the various components; thereafter loading should be near-instantaneous.

TECHNICAL REQUIREMENTS

Minimum desktop requirement is a PC with at least 256Mb of memory, running Windows 2000.

The system will not run on the Apple Macintosh.

AVAILABILITY

Access to the client/server application (SITS Vision) is limited to campus-only. However, some SAINT information is available both on- and off-campus via the

"E-Vision" World-Wide Web interface. This may be accessed from the University (internal) Home Website, under "Quick Links" – use your email username and password.

HOW DO I GET IT?

If you do not already have access to SAINT, you should contact the LSS Service Desk – extension 3333 or email *ictservicedesk@bradford.ac.uk*

They will need to know the following information:

Full name

School

Telephone extension number

Whether you need Read-Only or Update access to the database

Subject to clearance by the appropriate Data Steward, and when arrangements made for system training (access is not normally granted until some training has been provided), the SAINT icons will be made available on your PC desktop.

TRAINING

Training is delivered by a number of methods:

Scheduled courses – these are normally provided "intensively" when a new system component is launched, with occasional "refreshers" as required thereafter. Details on: *http://www.bradford.ac.uk/admin/SAINT/training.html*

Workshops – held on a fairly regular basis for "customised" training, either to individuals or groups from single schools/departments/offices. If you have a particular requirement, contact ICT Service Desk with your request.

"Cascade" training – more informal training provided by experienced SAINT users to their colleagues within schools/departments.

Occasional “one-off” events, such as lunchtime briefings, etc. See website for details.

“one-to-one” training may be provided on request

HELP AND SUPPORT

As well as this manual and the online help within the application, you may also contact ICT Service Desk with any SAINT queries: your call details will be diverted to the SAINT support staff who will do their best to offer help and advice. This applies to everything from general enquiries to major problems with the software (which may require assistance from SITS support staff).

THE SAINT PROJECT WEBSITE

Information on the SAINT project (including planned developments, hints and tips, downloadable documents, etc.) may be obtained from:

http://www.brad.ac.uk/admin/SAINT/

THE SAINT USERS MAILING LIST

As a SAINT user you will be automatically subscribed to the SAINT Users email list – *saint-users@bradford.ac.uk* - this acts as a bulletin board for dissemination of information, project news, etc. by the Project Team, and also a forum for exchange of hints, asking questions, and so on – it’s your list, please use it!

GETTING STARTED

There are actually **four** SAINT databases:

"LIVE" – this is the "real" system, containing up-to-date information.

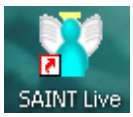
"TEST" – this is a "practice" database containing data copied from "Live" on a regular basis. Your username and password will give you access to both databases (note however, that if you change your password on one database, this is not automatically reflected in the other, so it is wise to keep the two "in line" – see *Passwords* below).

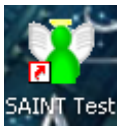
"TEST" allows you to try out operations without the risk of incorrectly updating "live" data – but remember that any work you do in this database will be lost at the end of each month!

"TRAINING" – this is used by Project Team staff for specific training courses, and is not accessible by end users.

"TEAM" – similarly, this is used by the Project Team for specific tasks (such as testing new software releases). Again, not accessible by end users.

THE SAINT DESKTOP ICONS



and


Once your access has been granted, the SAINT database icons will be available on your PC. These should be visible on your desktop, but are also accessible via the Windows Start Menu, under "UoB Apps" → "SITS". Click the icon (or double-click if on the desktop) – Live or Test - to access the SAINT login screen.

LOGGING IN

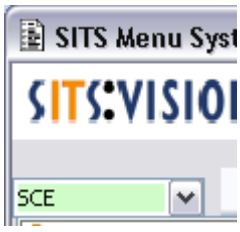
The SAINT login screen should appear as follows:

Note that the field currently awaiting entry of data is highlighted – in GREEN for the Test database, or in BLUE for Live.

NAVIGATING THROUGH THE SYSTEM

ACCESSING SCREENS DIRECT

If you know the three letter acronym for the screen eg SCE you can type it in the field at the upper left side of the menu screen and then either TAB or ENTER

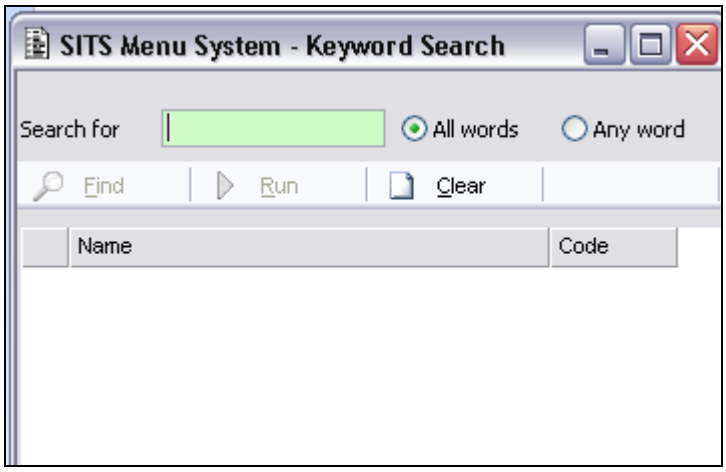


KEYWORD SEARCH

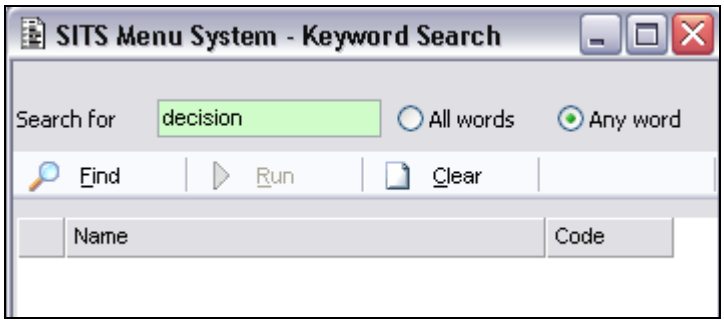
Of course, you may not know (or have forgotten) the name of the screen you want; in this case, "**SEARCH**" may be of help.

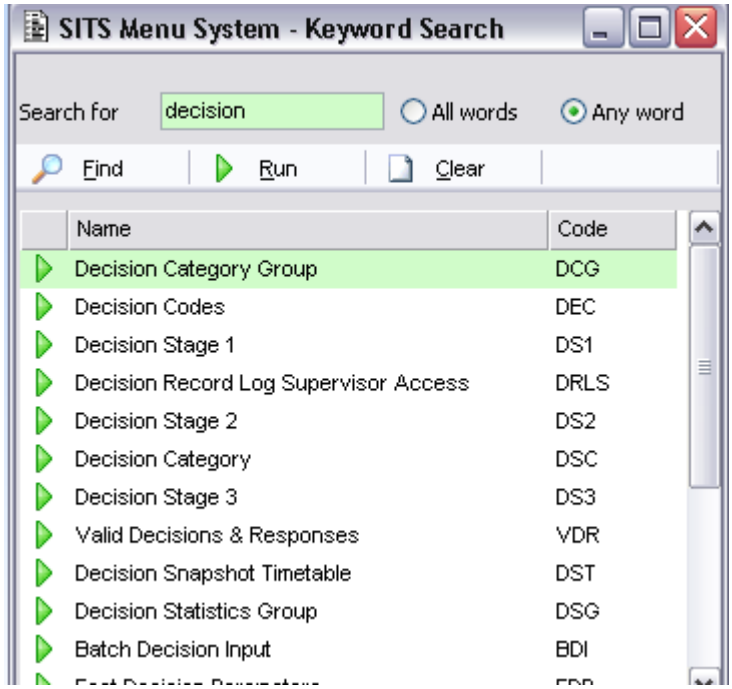
- Click on the 

button



- Enter a word you wish to search for: For example, if you know that the screen you want is likely to have the word “Decision” in the name, type “decision” in the field (case is irrelevant), either choose “ALL WORDS” or “ANY WORD” and press FIND





Choose the screen you want by highlighting and double-clicking.

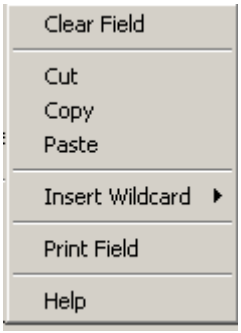
THE MENU BAR

This provides access to a number of system menus, much as in Word, Excel, etc., and will vary from screen to screen, a typical example being shown below:

THE TOOLBAR

THE MOUSE MENU

Clicking the right-hand button on the mouse will also give access to a number of commands (depending on what type of screen you are in and where the mouse is positioned), via a “pop-up” menu. A typical example is shown below:



REPORT & PROCESS SCREENS

Besides Data Access screens, SAINT also provides **PROCESS** and **REPORT** Screens.

With this type of screen, you enter relevant parameters, (usually in the top half), and mouse-click on a button to invoke a particular process. This may be the running of a report, or a bulk update of a number of database records. Examples is shown in **Fig 2** and **Fig 3**.

Figure 2: A typical process screen

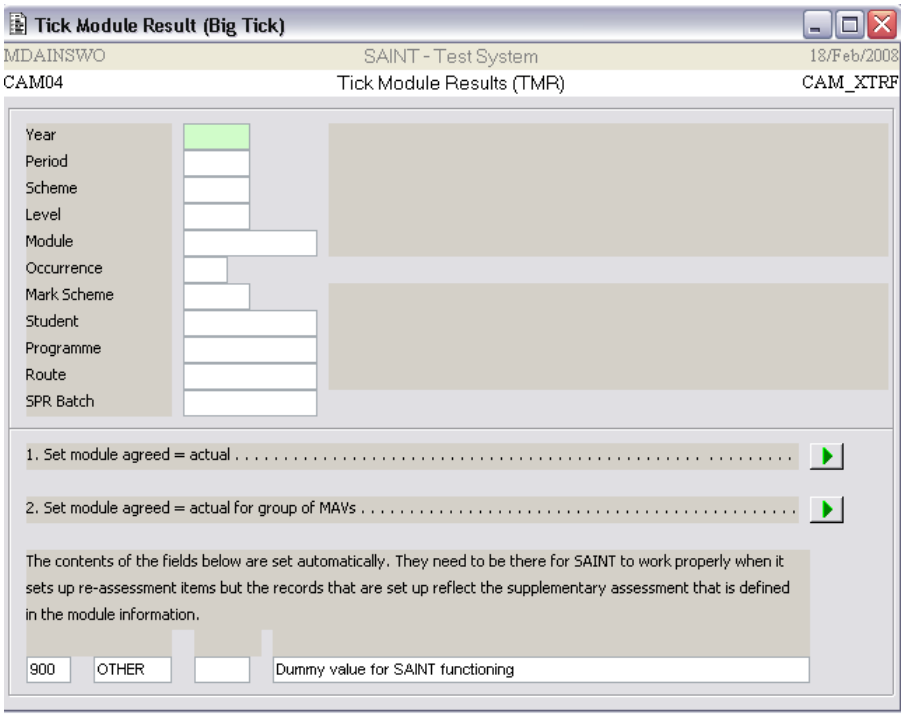
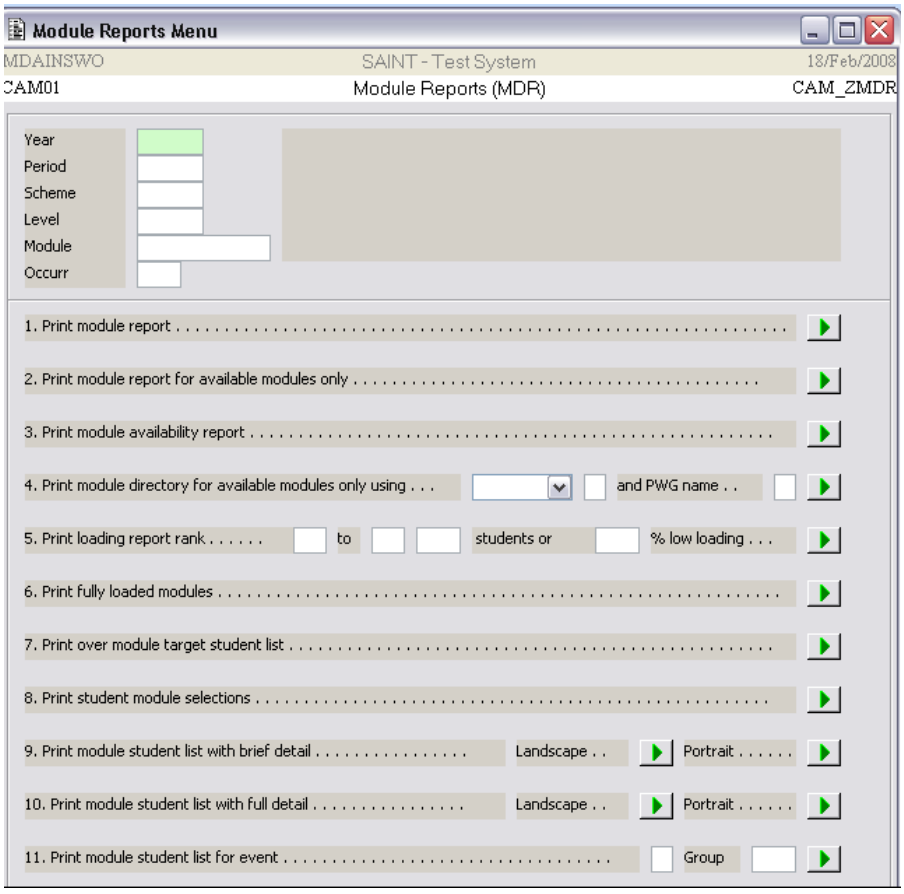


Figure 3: A typical report screen



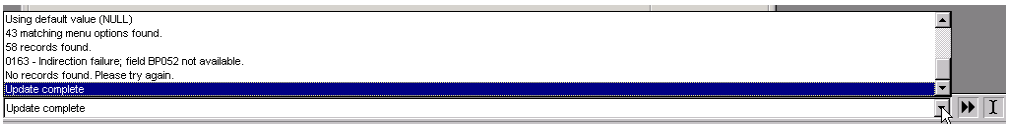
SYSTEM MESSAGES

At various times you may receive messages back from the system. These may be in one of two forms: summary messages in the message line at the bottom of the screen, or more detailed messages in the MESSAGE BUFFER.

SUMMARY MESSAGES

These appear at the bottom of the screen:

You may review all messages displayed during your current login session by clicking the arrow at the right of the message line:



Typical summary messages include ***"Store was successful"*** or ***"1723 – Database not modified; store not executed."*** (this simply means that nothing has changed since your last Store command, so no action is necessary!)

THE MESSAGE BUFFER

Some messages are stored in the Message Buffer – this may be accessed by pressing the  button on the toolbar, or Function Key 

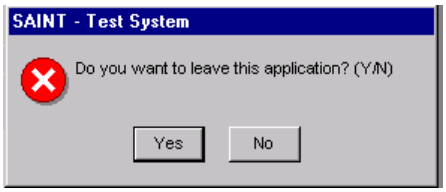
.

If there are no messages in the buffer***, "No text available in message frame"*** is displayed in the summary message bar at the bottom of the screen.

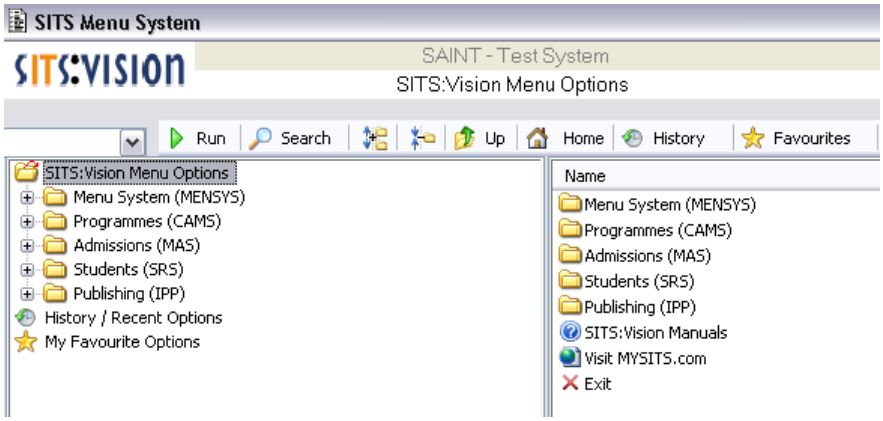
In some cases (e.g. after running an update process), the Message Buffer is displayed automatically.

Logging Out

When you have finished working, you may close SAINT by clicking the button in the extreme top right corner of your screen, which will then display:



Or by 'collapsing' the trees on the left hand side of the screen:



Double click on 

"Emergency" Shutdown

In some cases (e.g. due to a network problem), the above procedure may fail to close SAINT successfully. If this happens, you may close the application by the following method:

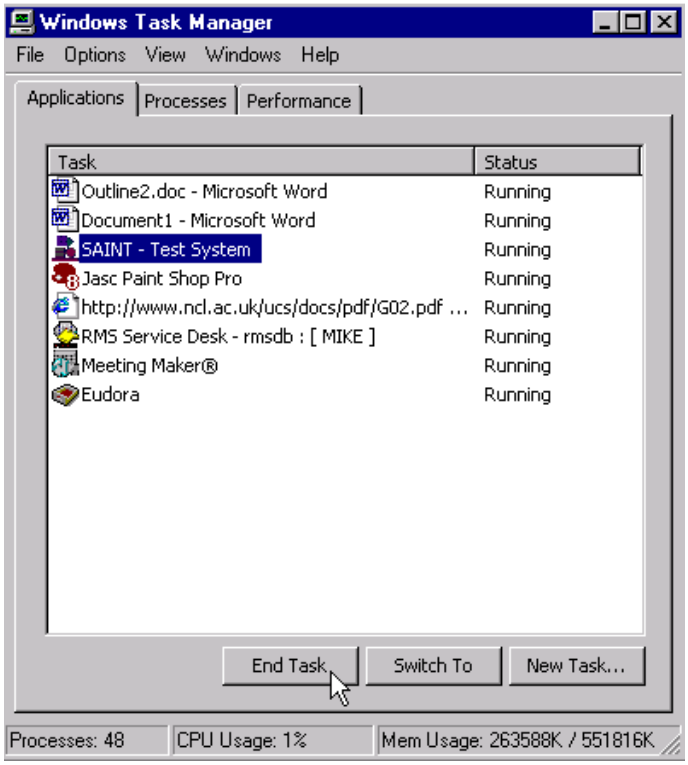
On your keyboard, press the 

, 

and 

keys simultaneously.

In the dialogue box, press "Task List". The Windows Task Manager is then displayed:



Select the SAINT icon and press “End Task”. Close the Task Manager with  .

SYSTEM COMPONENTS AND TERMINOLOGY

SAINT is made up of four major components:

***MENSYS* (Menu System)**

***MAS* (Marketing and Admissions System)**

SRS (Student Records System)

CAMS (Credit Accumulation Management System)

MENSYS (Menu System) supports the facilities responsible for overall management of the SITS:Vision software. This includes:

Management and control of user profiles

Management of access and security

Management of menu options

Functionality of pull-down menus

Customisation

System parameters

Control of printing and printer models

Batch processing management

Standard letter production, including automatic batch letter generation

Auditing

Award certificate production

Archiving

System set-up

MAS (Marketing and Admissions System) contains subsystems covering Enquiries and Undergraduate & Postgraduate Admissions

SRS (Student Records System) contains details - names, addresses, personal and demographic data, etc. - of all students.

Note that in this context the term "Student" refers not just to those enrolled on University courses, but also applicants, who have a "skeleton" ***STU*** *(Student) record created - and a UB Number allocated – at the point of application.*

CAMS (Credit Accumulation Management System) facilitates the management of Courses and Modules, and Students' progress through them.

It is important to understand that, although SRS and CAMS are closely linked in day-to-day work, they are potentially separate systems (it is possible to purchase one without the other, although at Bradford we have implemented both), and as such have their own coding systems.

DATABASE TABLES AND SCREEN NAMES

SAINT is a **RELATIONAL DATABASE**, running under the Oracle RDBMS (Relational Database Management System).

An RDBMS organizes data into **TABLES** (also known as **ENTITIES**), each consisting of related **ROWS** and **COLUMNS**.

If you are familiar with spreadsheets,(such as Excel), each table/entity is similar to a worksheet.

Each table has a unique identifying name (e.g. **STU** for student).

A simplified, theoretical **STU** table is shown in **Figure 5**.

Fig 5: A Student Table

UB No	Surname	Forename	Date of Birth	Gender	Nationality
03123456	BROWN	Alan	03/06/1983	M	000
03123457	CHANG	Li	30/01/1985	F	652
03123458	KHAN	Mohammed	17/12/1984	M	683
03123459	SCHMITT	Eva	22/04/1979	F	656

Nationality descriptions may be held in a separate table:

Fig 6: A Nationality table

Nationality	Description
000	British
601	Yemen
614	Belgium
626	Canada
652	China (Taiwan)
656	Germany (Federal Republic)
683	Kenya

This means that the Nationality descriptions only need to be stored once, with just the code being entered against each student – thus saving space in the database.

Each table will contain one or more Key Fields, each of which uniquely identifies a particular row. In the examples above, UB Number and Nationality Code would be key fields.

Each of the screens in SAINT has a three- (sometimes four-) letter name, usually taken from the similar acronym for the database on which it is principally based.

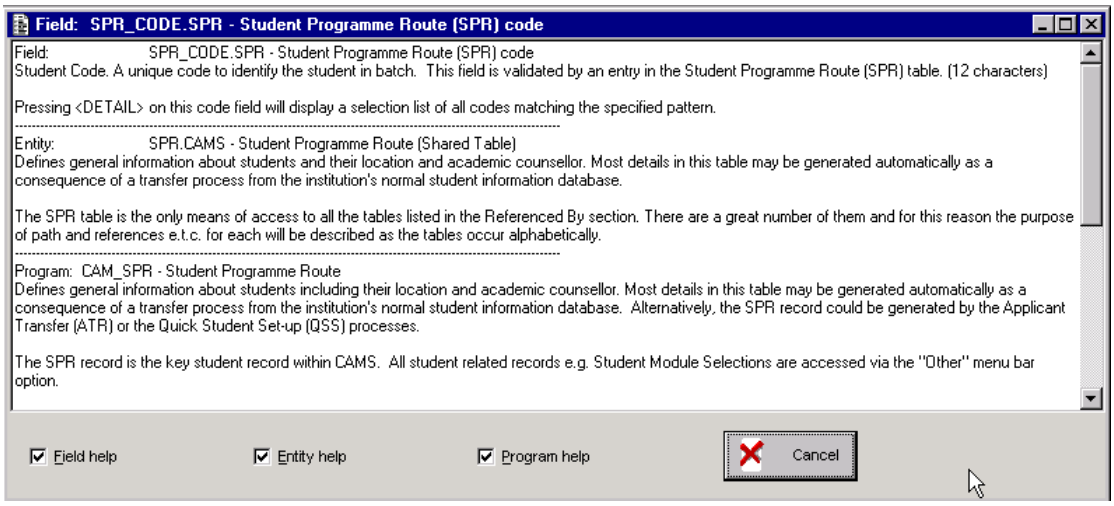
For example, there is a table called **SPR** (Student Programme Route), which takes its basic data from the **SPR** table.

Using ‘Help’

If you place the cursor in any field, and click 

or press Function Key 

, the Help dialogue will tell you about the field you have highlighted, the principal database table being accessed, and the computer program which is running when you use that screen.



From the “bottom up”, the example Help screen above shows that:

The running **PROGRAM** is CAM_SPR, i.e. the screen SPR within the CAM(s) system

The principal database **TABLE (OR ENTITY)** being accessed is SPR_CAMS, i.e. the SPR table within the CAMS system

The **FIELD** (equivalent to a table column) currently highlighted is SPR_CODE.SPR, i.e. the Student Programme Route Code in the SPR table

(At each of the three levels, the help screen gives more information about functionality, validation, etc.)

Note that, although each screen derives its data *principally* from one database table, it *may* also contain information from other tables. For example, the SRS screen **QSU** (Quick Student Update) takes its key field (SCJ Code) from the table **SCE** (Student Course Enrolment), but also contains fields taken from other tables including **AYR** (Academic Year), **PRG** (Programme of Study), **ROU** (Route), **STU** (Student), **STA** (Student Status), and so on.

APPENDIX 1 - COURSE BLOCK, STAGE AND OCCURRENCES

BLOCK

As used at Bradford, a Course in SAINT takes the form, e.g. "Computing Undergraduate Foundation Year"

Each SAINT Course is deemed to take a specified number of academic years to complete.

Each academic year of the Course is designated as a Course Block (CBK)

Examples:

Computing UG Foundation Year (code CMUGF) takes one year to complete and consists of one Course Block, CBK 1

3-year Computing UG degree (code CMUGD3) takes three years to complete and consists of three Course Blocks, CBK1, CBK2 and CBK3

4-year Computing UG degree (code CMUGD4) takes four years to complete and consists of four Course Blocks, CBK1, CBK2, CBK3 and CBK4

Each Course Block has a Course Block Occurrence (CBO) for every year in which it is taught

Where a student progresses normally through a 3-year course for example, they will proceed thus:

Academic year	Course Block CBK	Occurrence - CBO
2002/3	1	"CBK 1 in 2002/3"
2003/4	2	"CBK 2 in 2003/4"
2004/5	3	"CBK 3 in 2004/5"

A student who repeats the first year of the course will proceed thus:

Academic year	Course Block
2002/3	1
2003/4	1
2004/5	2
2005/6	3

The pattern for students taking a nominally full-time course on a part-time basis will be similar.

STAGE

As noted above, each Course is deemed to take a number of academic years to complete.

Each year, or Block, of a Course is associated with a particular academic level (which maps onto nationally-defined standards).

The academic level associated with each year of study of undergraduate courses is known at Bradford as the "Stage".

For many Courses, Block and Stage are the same, for example in the case of the 3-year Computing UG degree

Course Block	Stage
1	1
2	2
3	3

There are significant exceptions to this situation, however. Chief among them are:

Foundation Year

Course Block	Stage
1	0

Sandwich courses - where students are on placement during Block 2 or Block 3, or some combination of both, and are not allowed to proceed to the final year until they have completed Blocks 2 and 3 satisfactorily

Course Block	Stage
1	1
2	2
3	2
4	3

Course Block	Stage
1	1
2	2
3	3
4	3
5	4

GUIDANCE TO USERS

Module diet codes relate to Course Blocks *(bold italic* in the table*)*, e.g. CIVSTR, BEng Civil and Structural Engineering

Stage	3yr Hons	3- yr Ord	4-yr Hons	4-yr Ord	5-yr
1	3H***1***	-	4H***1***	-	5H***1***
2	3H***2***	3O***2***	4H***2***	40***2***	5H***2***
2			4H***3***	40***3***	
3	3H***3***	3O***3***	4H***4***	40***4***	5H***3***
3					5H***4***
4					5H***5***

In this example, the diet coded CIVSTR3H1 breaks down as follows:

Route Code	Course duration	Course type Hons	Course block
CIVSTR	3	H	1

*In the **GSD** screen:*

Stage means just what it says and refers to the academic level.

At the moment, students are further identified by *Batch* according to whether they are registered for Honours or Ordinary degrees. Individual module diets are also identified in this way so as to match a student to only one diet.

(HONS and ORD are crude batch coding which will almost certainly change as we gain more understanding of the use of the Batch code and use it more subtly.)

Students are also assigned to a *Course Block* (found on **SCE**). Individual module diets are also identified in this way so as to match a student to only one diet.

Students can also be selected on this screen according to *Mode of Attendance* - the usual double click on the column headed 'Mode' gives the options that are in the MOA table

*In the **EMD** screen:*

At the moment *batch* allows most users to select students according to whether they are registered for Honours or Ordinary degrees (but see note above).

Stage – is the study level on EMD.

EMD does *not* identify direct entrants into year 3 and people who have taken time out.

OCCURRENCE

Block and Occurrence are normally grouped together on SAINT CAMS screens.

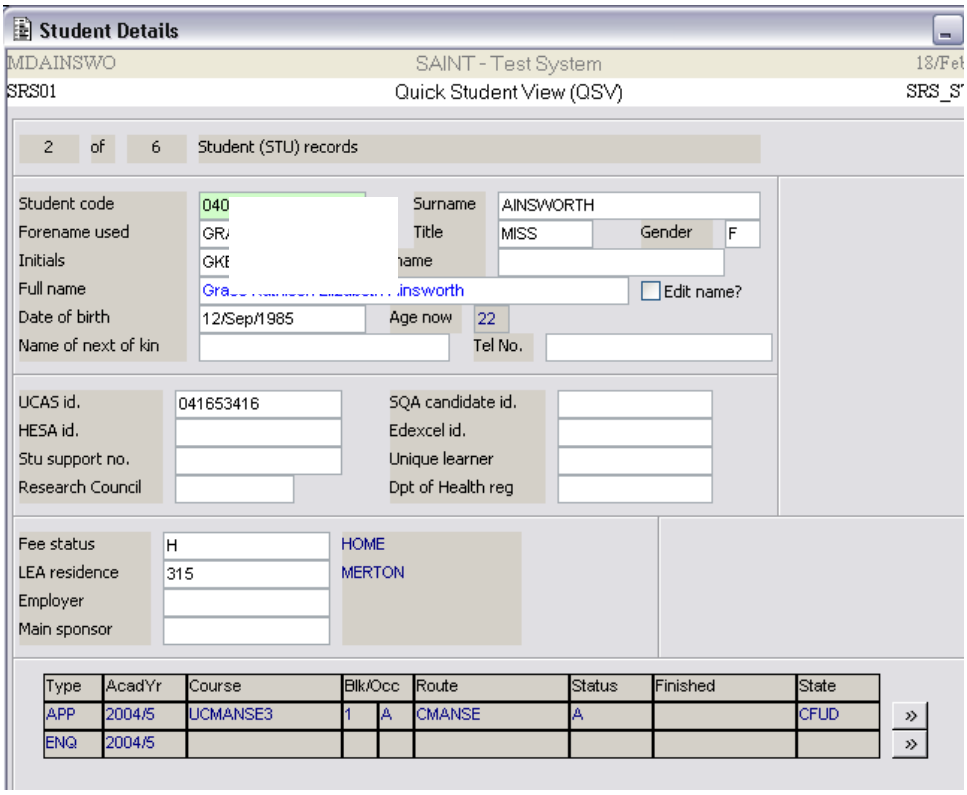
Occurrence is simply a way of identifying a course (or module) that occurs more than once in an academic session. These multiple occurrences may be either “chronological” (the course may be run several times a year, perhaps starting initially in September, then again in January), or “geographical” (the course may be run in parallel in Bradford and Singapore for example). In the vast majority of cases, this will not apply, in which case the default occurrence will be “A”.

APPENDIX 2 – UB NUMBERS

There is often confusion about the use of student IDs ("UB Numbers") in SAINT. All you need to know is the following:

On application to Bradford, all applicants are set up with a 'skeleton' Student (**STU**) record in SAINT, identified by a unique 8-digit UB Number.

This may be used to retrieve a student's personal details, for example using the **QSV (Quick Student View)** screen:



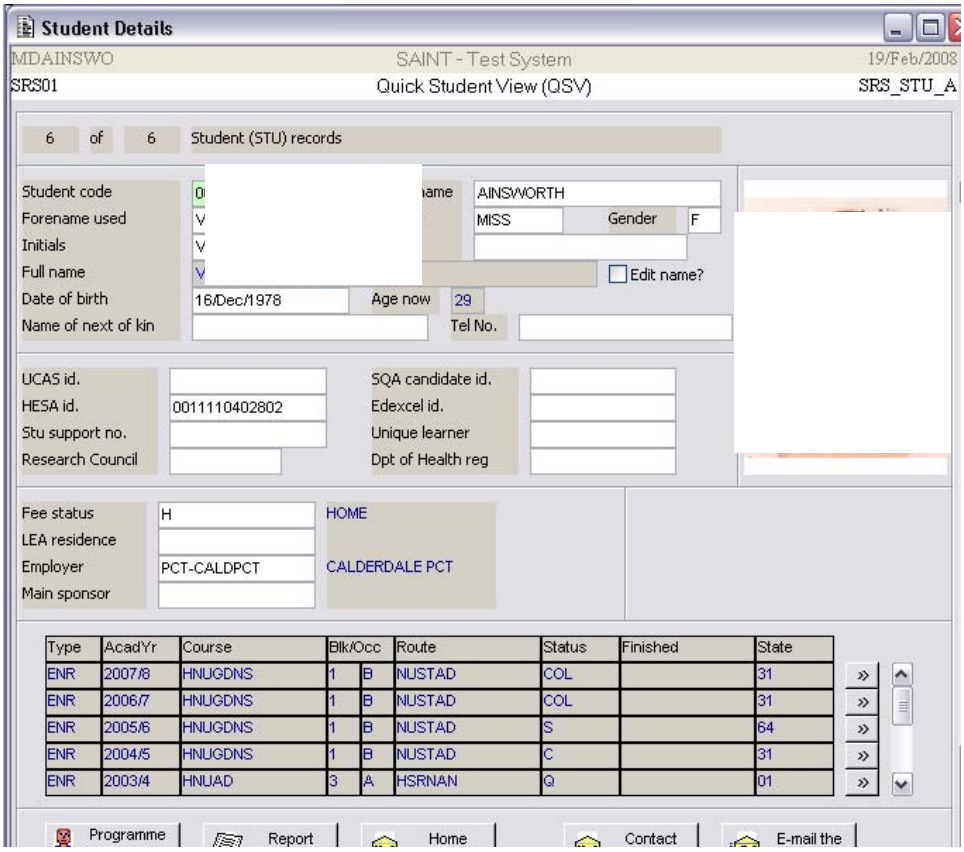
When the applicant subsequently enrols on a course at the University, s/he is allocated a **Student Course Join (SCJ)** code; this is simply the 8-digit UB Number, suffixed by a slash and a single digit – "1" for the first course that student has enrolled on. If s/he subsequently joins *another* course (for example, by graduating and taking up postgraduate study, or simply by switching to different undergraduate course), a new SCJ code is allocated, with a suffix of "/2" to indicate the *second* course.

Most SAINT screens use this 10-character SCJ code to identify the student; note also that the **SPR (Student Programme Route)** code is synonymous with SCJ code.

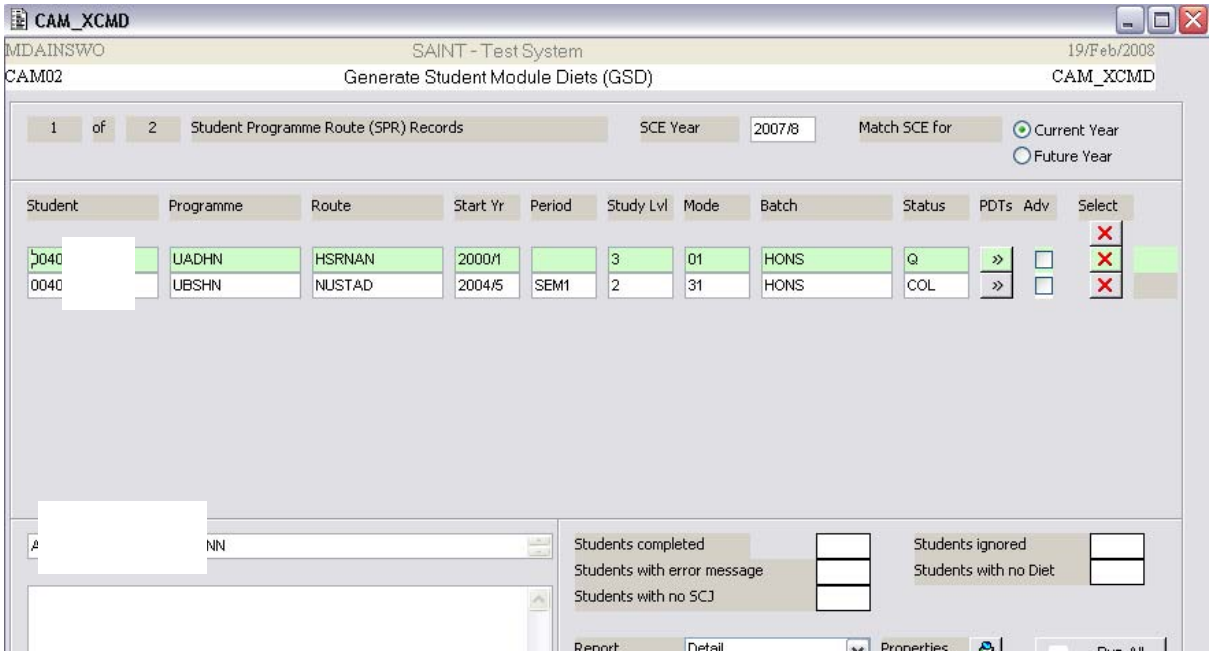
In some cases, a student may be enrolled on two courses simultaneously, in which case they will have TWO valid current SCJ/SPR codes. Make sure that you are looking at the "correct" record when you are using the system. The best way to ensure this is to always select on the basis of "UB Number plus wildcard", e.g. if looking for details of student 99435575, enter 99435575 [Esc] *, which will retrieve *all* appropriate records – 99435575/1, 99435575/2, etc.

You may then do a 'secondary' retrieve on one of the records if required.

Retrieval of student in QSV shows five enrolment records:



If you were generating Module Diets for that student, you would need to take care that you were using the correct SCJ record, to get the right modules:



APPENDIX 3 – HOW THINGS CONNECT

SAINT System Components and Terminology

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Management of menu options

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Customisation

System parameters

Control of printing and printer models

Batch processing management

Standard letter production, including automatic batch letter generation

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System set-up

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SRS (**S**tudent **R**ecords **S**ystem) contains details - names, addresses, personal and demographic data, etc. - of all students.

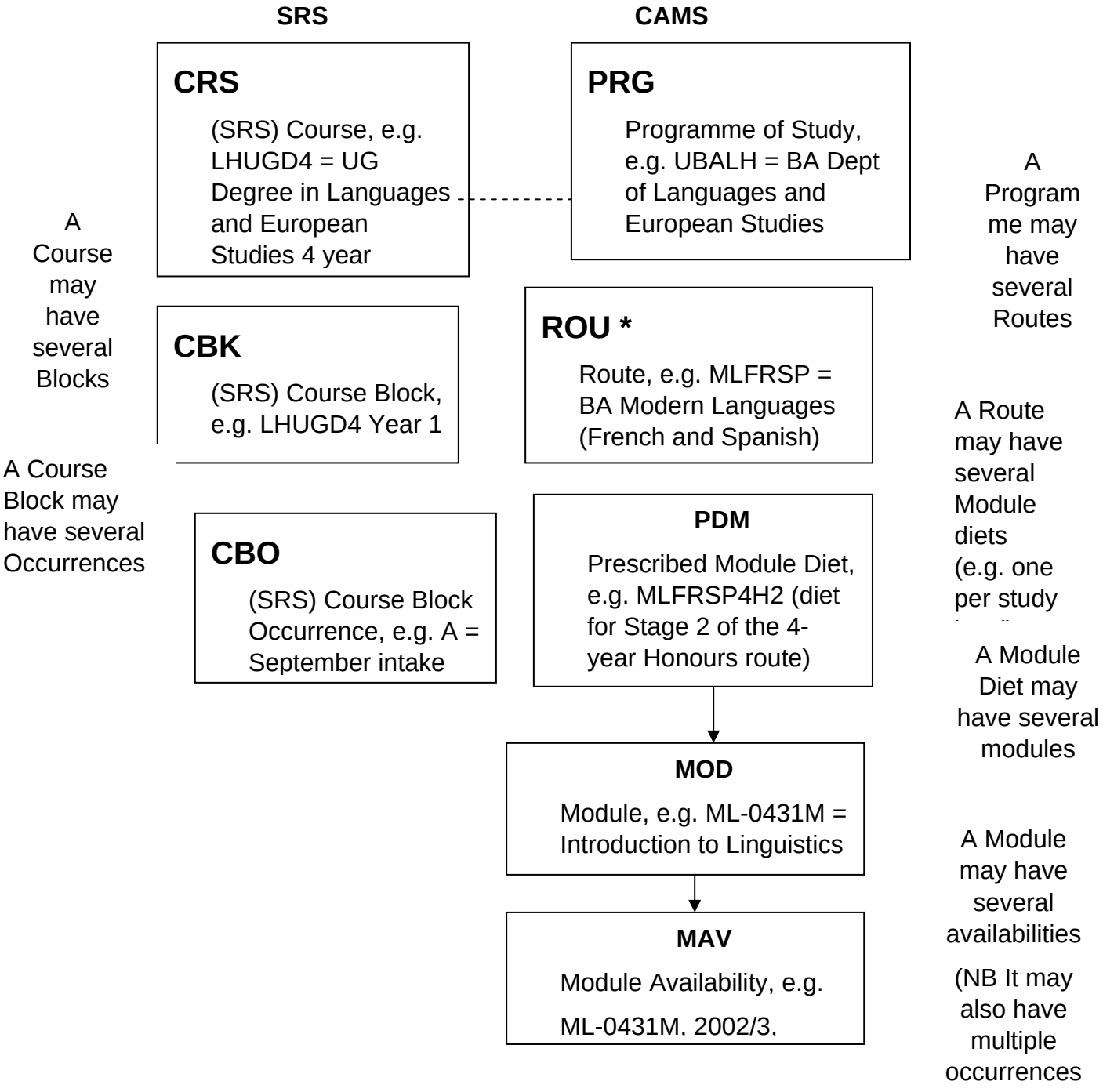
*Note that in this context the term "Student" refers not just to those enrolled on University courses, but also applicants, who have a "skeleton" **STU** (Student) record created - and a UB Number allocated – at the point of application.*

CAMS (**C**redit **A**ccumulation **M**anagement **S**ystem) facilitates the management of Courses and Modules, and Students' progress through them.

It is important to understand that, although MAS, SRS and CAMS are closely linked in day-to-day work, they are potentially separate systems (it is possible to purchase each individually - although at Bradford we have implemented all three), and as such have their own coding systems. This is why there is a MAS Course Code **and** an SRS Course Code **and** CAMS Programme and Route Codes.

The following pages show (in simplified form) the most important database tables in the SRS and CAMS systems, and how they relate to each other.

SRS & CAMS (1): COURSE HIERARCHY



NOTE:

* You may also find in SAINT references to *Pathway* (**PWY**) – this is essentially a variant on *Route*, and is widely used in institutions which make extensive use of joint honours courses; at Bradford, *Pathway* and *Route* are effectively synonymous.

SRS & CAMS (2): STUDENTS ON COURSES

SRS **CAMS**

STU

Student, e.g. 03123456

A Student may join one or more courses

SCJ

Student Course Join,

e.g. 03123456/1

SPR

Student Programme Route e.g. 03123456/1

A Student may join one or more Programme/ Route(s)

A Student may have several enrolments (one per year)

SCE

Student Course Enrolment, e.g. 03123456/1, Block 2 in 2003/4 (see note on Status below)

SMS

Student Module Selection

Student makes Module Selections

SMO

Student Module Taking

Module Selections are scheduled into Module Taking records

SMR

Student Module Result

Students are assessed and obtain Results

NOTE 1: STATUS

Status is held in various different tables, and may legitimately vary between them:

STU – *Status* defines that the record refers to (say) a Current student, a Current applicant, etc.

NOTE 2: COURSE BLOCK

The Course Block shown in the **SCJ** record is that recorded *at the point the student joins the course*, and will not change.

APPENDIX 4 – COMMONLY USED SCREENS

ENQUIRIES

Enter new enquiries	***QED***
Check previous enquiries	**ESD**
Check actions taken on an enquiry	**ESA**
Check calls by date	**ESC**

ADMISSIONS

Check applicant summary details	**VAS**
Set up an interview/open day	**IOD**
Schedule interview/open day invitation	**IOS**
Enter clearing application	**QCE**
Enter new applicant details (PG only)	***QAS***
Quick Student Set-up	**QSS**

STANDARD LETTERS

Create a new letter	***SRL***
Amend a single letter	***GSL***
Print an amended letter	***PGL***

GENERAL STUDENT ENQUIRIES & UPDATES

View Student details	**QSV**
View Student details (more detail)	**QSU**
Student enrolment details for current year	**SCE**
Student enrolment details for current year (list)	**SCE1**
Student address maintenance	**SCJ3**

STUDENT MODULE SELECTION

Create Student (core) Module Selections	**GSD**
Add or remove Student Module Selections, schedule final choices	**EMD**
Replace/delete SMO for a single student	**RSM**
Replace/delete student SMS/SMO records	**XSM**
View student module selections	**SMS**
View SMS records, by module or student	**SMS1**
View SMO records	**SMO**
Check contents of Module Diets, by Route	**MDL**
Check contents of Module Diet, by Diet	**PDM1**
View Student Program/Route details	**SPR**

STUDENT MODULE ASSESSMENT

Enter Student Module Marks	**SAS**
Agree marks, post-Assessment Committee	**TMR**
View Student Module Results	**SMR**
Undo Student Module results	**SMRU**
Enter Student re-assessment	**RAS**

REPORTS

Student lists, e.g. Students by Route	**ESL**
Module reports, by Student, or by Route	**STR**
Students by Module	**MDR**

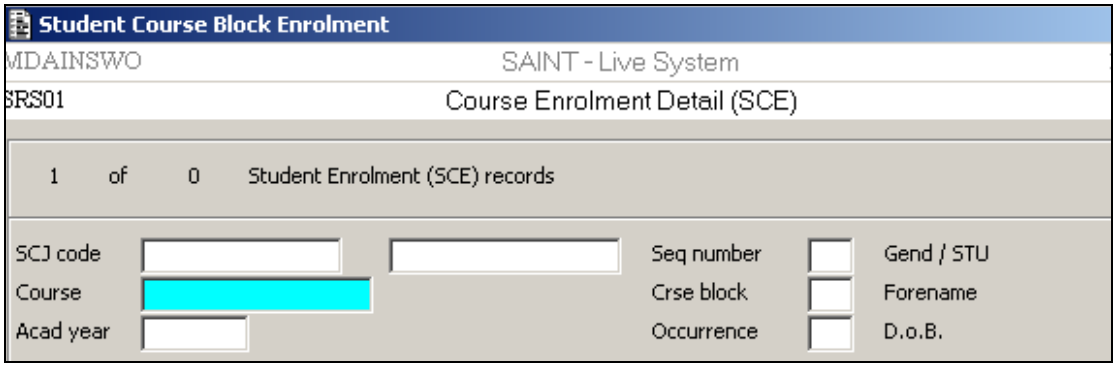
MISCELLANEOUS

Change password	**PWD**

APPENDIX FIVE – HOW TO FIND SAINT CODES

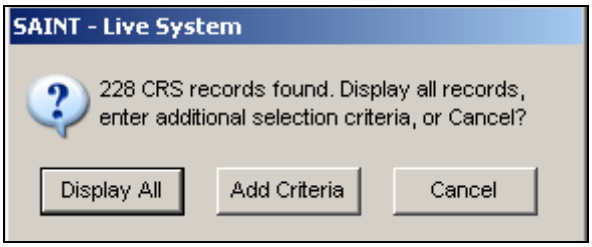
Most fields in SAINT that are populated with codes, will have a list that you can choose from. If you are not sure which codes to use – print off a list for future reference eg: if you wish to find out your own School/Department COURSE CODES:

- Go to SCE screen

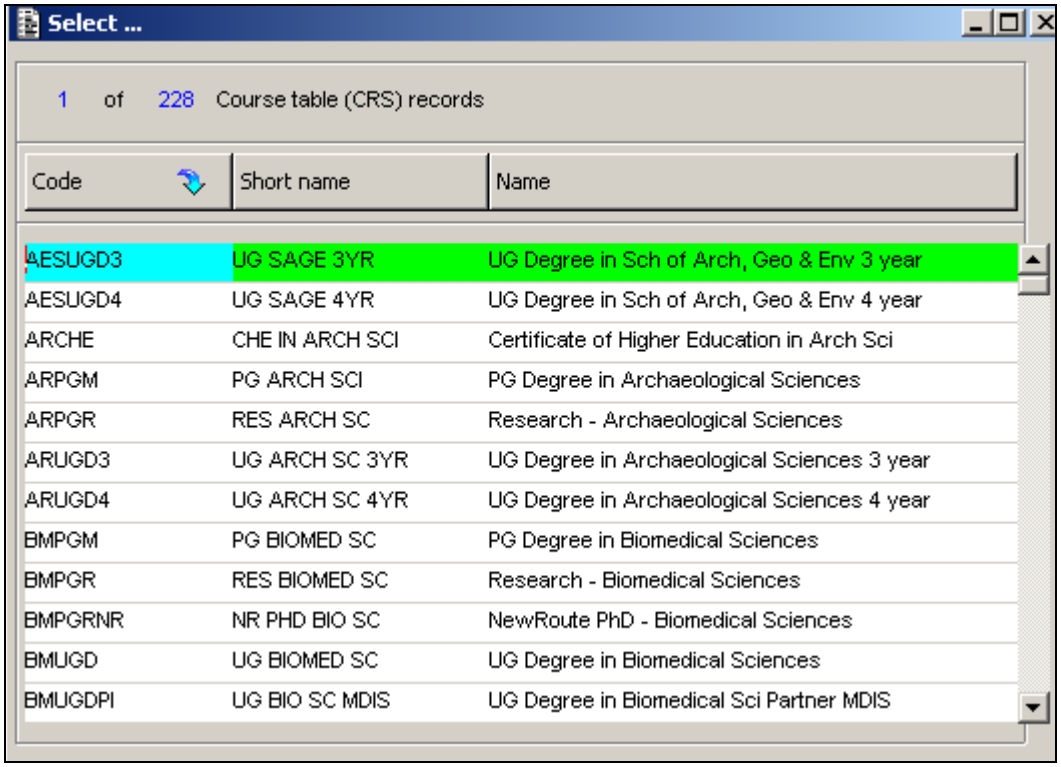


- Put cursor in Course Field and DOUBLE CLICK

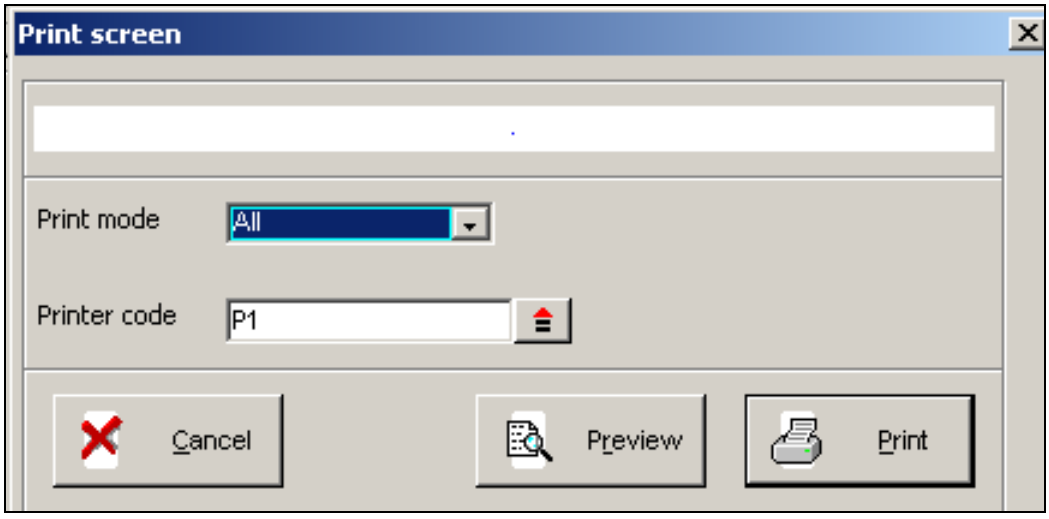
- A box appears asking if you wish to see ALL codes (DISPLAY ALL) or ADD CRITERIA



- If you choose DISPLAY ALL you will open up a box with ALL course codes across the University eg 228 – see over page



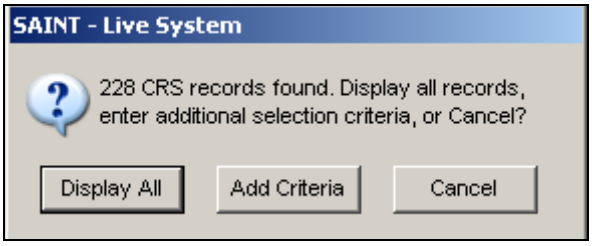
- You can then PRINT this table out – using F11 or PRINT from top menu



- When this box appears – choose ALL from Print Mode drop down menu and PRINT

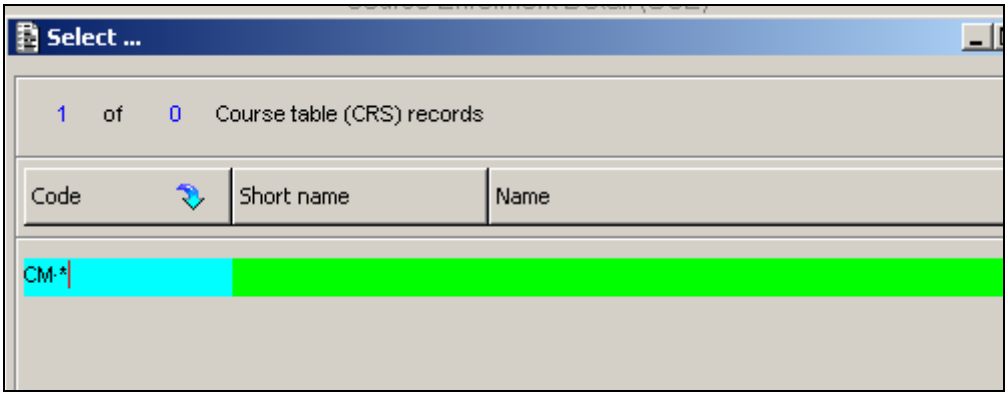
You will now have a full list of codes

If, however, you know your own COURSE CODES start with CM (for example)

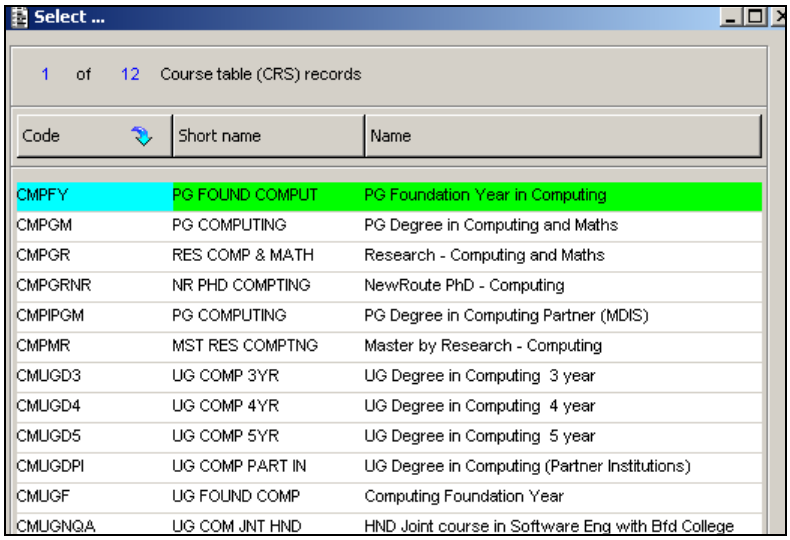


- Choose ADD CRITERIA

- In CODE field add, for example, your Department code, then GOLDSTAR and RETRIEVE F5



- This will display all COURSE CODES beginning with CM (Computing)



- This table can then be printed off