

DEPARTMENT OF HIGHER EDUCATION AND TRAINING

FOUNDATION PROVISION IN DEPARTMENTALLY APPROVED PROGRAMMES

12 May 2012

1. THE PURPOSE OF FOUNDATION PROVISION

The primary purpose of foundation provision is to improve the academic performance of students who are at risk due to their educational backgrounds.

Higher education performance patterns show that the majority of students who are at risk because of disadvantaged educational backgrounds are being admitted to mainstream programmes. This is because significant numbers of students who meet minimum admissions criteria are nevertheless underprepared or unprepared for regular programmes, and hence do not succeed or drop out.

A key role of foundation provision is therefore to support educationally disadvantaged students who are un/underprepared despite meeting minimum admission criteria, by enabling them to be placed on an extended curriculum that will give them the academic foundations for successfully completing their studies.

The focus of foundation provision is particularly on first-time entering university students. The high drop-out rate of students in their first year of study revealed through an analysis of specific cohorts is disconcerting. In cohort studies, students of a cohort or group who enrolled in a specific year are tracked throughout their studies until they graduate or drop out. A preliminary data analysis of the 2005 cohort of the university sector has shown that the drop-out rates of first time entering students in a 3-year qualification are on average 26% in the first year, with a further 9% in the second year and 6% in the third year, while for a 4-year qualification, the average drop-out rates for first time entering students are 15% in the first year, with a further 7% in the second year, 4% in the third year and 3% in the fourth year.

Departmentally approved programmes which enrol large numbers of students and in which the student success rate, and consequently also the student graduation rate, are low, should be investigated with the view of improving the total success and graduation rates of the university by means of effective use of foundation provision. However, this focus does not exclude from foundation provision those programmes enrolling small student numbers.

Student success rates are determined as: HEMIS full-time equivalent (FTE) degree credits awarded to students divided by HEMIS FTE student enrolment for a particular

year. A graduation rate is the total number of graduate student heads in a given academic year divided by the comparable total number of enrolled student heads in the same academic year, using HEMIS data.

Universities should preferably refrain from using foundation provision to provide access for students who are admitted via the Senate Discretion route if they do not meet the minimum statutory requirements for university entrance. Reasons are the following:

- The outcome of such practices is unacceptably high failure rates among foundation students, because they are very poorly prepared for higher education or for the particular university qualification, at the same time as high failure rates continue to exist among mainstream students who would benefit substantially from foundation provision but are not offered such support. These practices are not an efficient use of resources;
- The need for education and training opportunities for students who do not meet the minimum criteria for entering higher education is fully recognised. Applicants in this category are best advised to seek such opportunities in other areas of the post-school system, particularly in the Further Education and Training (FET) Sector, where strong growth is planned;
- High failure and attrition rates result in universities losing potential state income within the teaching output sub-block grants where graduates in undergraduate programmes are funded;
- The Department's bids to Treasury for additional state funds for the university sector are weakened by low student success and graduation rates. Treasury has become increasingly focused on performance measures and targets of improvement;
- Students who do not meet the minimum statutory requirements for entry into a university, such as students admitted via the Senate Discretion route, should, according to HEMIS definitions, not be captured in HEMIS, and can therefore not be considered for state funding.

Foundation provision and extended programmes have been used in a number of institutions (particularly historically advantaged universities) to enable the admission of educationally disadvantaged students who, while complying with the minimum statutory entry requirements, do not meet the admission criteria for the particular programme concerned. This is in line with the redress purpose of foundation provision if it is managed effectively. However, the same kind of situation as outlined above can arise if the students admitted to an extended programme are substantially underprepared in relation to the programme concerned and if, as is usually the case, a significant proportion of the mainstream intake are also at risk despite formally qualifying for entry. This again leads to unacceptably high failure and dropout rates in both the mainstream and the extended programme, with the consequences outlined above. Therefore, in considering what categories of student should be placed in an extended programme, universities are advised to focus first on students who meet institutional admission criteria but, because of educational disadvantage, would have a low probability of succeeding if admitted directly to mainstream provision. This category of student stands to benefit substantially from foundation provision. It is advised that institutions should have in place a process of identifying students at risk. Furthermore if allocated space is available, educationally disadvantaged students that do not meet

programme specific admission criteria but comply with the minimum statutory admission criteria should be considered for placement in the extended programme.

Universities should also refrain from using foundation provision as a mechanism to enrol more first-year students than the total planned first-time entering enrolment for a particular year. Such a trend would result in the actual total teaching input units of a university remaining consistently higher than the total state funded teaching input units. The over-enrolment of students implies that such students are not state funded within the teaching input sub-block grant.

Universities are therefore advised to set their admissions and placement policies accordingly.

Universities should note that minimum admission requirements for Higher Certificate, Diploma and Bachelors Degree programmes requiring a National Senior Certificate (NSC) or requiring a National Certificate Vocational (NCV) are set out in Government Gazette no 31231 of 11 July 2008 and no 32743 of 26 November 2009 respectively.

In summary, foundation provision is aimed primarily at equity of outcomes. The central goal of foundation provision is to ensure that educationally disadvantaged students who are at risk of failing are given the necessary academic support to succeed in becoming a graduate.

2. THE IMPORTANCE OF FOUNDATION PROVISION

Foundation provision is currently directly linked with government's performance based funding framework for universities as an earmarked funding allocation. The Ministry places a high priority on extending and firmly establishing the principle of foundation provision within the university sector.

This importance is reflected in the following statistics on foundation provision:

- The initiative to target 10% of first-time entering students in 2004 has already increased to the current average of 14% of planned first-time entering students at contact universities;
- Actual enrolled foundation student heads in the university sector grew on average by 17% per annum from 2007 to 2010; and
- In 2009, the 203 state funded programmes for foundation students were increased by another 45 programmes, representing an increase of 22% in programmes.

Since the concept of foundation provision has been firmly established within universities since 2004 through state funding as a steering mechanism, the Department of Higher Education and Training is discarding the fixed triennium periods, and is firmly establishing foundation provision within the various directorates and chief directorates within the Department dealing with issues such as HEMIS, academic programme policy, enrolment planning, funding, and teaching development by academic experts. (See section 11 for the amended funding approach.)

3. TERMINOLOGY

The term “foundation programme” is often used to refer to learning activities, at the lower end of the higher education band, that are intended to enable students from disadvantaged educational backgrounds to acquire the academic foundations necessary for succeeding in higher education. However, since national policy does not provide for foundational qualifications, the term “foundation programme” does not accord with the formal definition of a programme, which is “a purposeful and structured set of learning experiences that leads to a qualification”¹.

In the interests of consistency and clarity, the term “foundation provision” is used in this document in preference to foundation programme, and the term “extended curriculum programme” is used to refer to a whole degree or diploma programme in which foundation provision is located.

4. CRITERIA AND PROCEDURES

As foundation grants were introduced for the first time in 2004 to allow institutions to bid for earmarked funding for foundational provision offered in addition to regular provision, the procedures applied were in accordance with the funding framework. It recognised the role of foundational provision as a strategy for improving success and graduation rates, particularly among students from disadvantaged educational backgrounds.

In light of the review of the funding framework and the extended outcome of this review, the criteria and procedures for foundation funding are confirmed as being intended to achieve the following:

- to ensure that foundational provision is located in Departmental approved higher education programmes;
- to ensure that students engaged in foundational provision are registered for a Departmentally approved higher education programme;
- to promote equitable allocation of grants across institutions by basing allocations on a funding migration strategy to be implemented for 2013/14 to 2015/16 to align the current distorted funding allocation shares of universities with university shares based on audited historical student data recorded in HEMIS.

Therefore the foundation provision within the programme must satisfy the following conditions:

¹ Council on Higher Education 2004. Higher Education Quality Committee: Criteria for Programme Accreditation. Pretoria.

- The primary purpose must be to provide a set of learning activities which are designed to enable students from disadvantaged educational backgrounds to perform successfully in their chosen fields of study.
- The components of the foundation provision must be intrinsic parts of the curriculum of the extended programme.
- The components into which the foundation provision is divided must be formal courses, i.e. courses which count as credits towards the award of the formal qualification. Each of these courses must include specific and identifiable foundation provisions which are relevant to the overall curriculum of the programme.
- The foundation provision must be additional to the coursework prescribed for the relevant regular curriculum. The credit total of foundation courses in the extended curriculum programme must be at least 0.5 and not more than 1.

5. EXTENDED CURRICULUM PROGRAMMES

Before submitting a formal request for the approval of an extended curriculum programme, a clear understanding is required of the different terminology. Working definitions and explanations are as follows:

Foundation provision is the offering of modules, courses or other curricular elements that are intended to equip underprepared students with academic foundations that will enable them to successfully complete a university qualification that has been approved by the Minister of Higher Education and Training. Foundation provision focuses particularly on basic concepts, content and learning approaches that foster advanced learning. Even where the subject matter is introductory in nature, foundation provision must make academic demands on the students.

Foundation provision is intended primarily to facilitate the academic development of university students whose prior learning has been adversely affected by educational or social inequalities.

Since the purpose of foundation provision is to enable students to successfully complete approved university qualifications, it is necessary that foundation provision be located within Departmentally approved degree/diploma programmes.

Foundation provision must be divided into components, i.e. formal courses (or modules), which are subject to the same design, presentation, assessment, administration and quality assurance standards as are regular courses.

More details of the structure and layout of courses are presented in section 7.

An *extended curriculum programme* must satisfy the following conditions:

- It must be one of the institution's formal (i.e. Departmentally approved) undergraduate degree/diploma programmes in which substantial foundational provision, which is additional to the coursework prescribed for the regular

curriculum, is incorporated. Certificates, having a formal time of 1 year, are excluded.

- The students engaged in an extended curriculum programme or any of its component foundational elements must be registered for the relevant Departmentally approved undergraduate qualification. Their primary registration must not be that of “occasional” (or “non-degree”) students or of “bridging programme” students. [Note that the formal undergraduate qualification can be a generic one such as a Diploma or Bachelor of Arts or Bachelor of Science or Bachelor of Science (Engineering).]
- Because those following an extended curriculum programme are expected to do additional work, the institutional regulations must specify that the curriculum of an extended programme is longer than the minimum time set for the relevant regular curriculum. The duration of the extension of the curriculum must be at least 0.5 and not more than one academic year.
- Even though an extended curriculum programme requires additional provision and study time, the total of the HEMIS credit values assigned to the extended programme must not exceed the Departmentally approved credit total for the relevant regular programme. In the case of three-year qualifications, such as a Diploma or BA, the approved credit total is 3.0. In the case of a four-year qualification such as a BSc (Eng), the approved credit total is 4.0. [However, the foundation provision in an approved extended curriculum programme will attract earmarked funding – see the funding policy on foundation provision.]
- The foundation provision within an extended curriculum programme must satisfy the following conditions:
 - The components of the foundation provision must be intrinsic parts of the curriculum of the extended programme. They must also be designed to articulate effectively with the elements of the regular programme.
 - The foundation provision must be additional to the coursework prescribed for the relevant regular curriculum. The credit total of foundation courses in the extended curriculum programme must be at least 0.5 and not more than 1. This is the equivalent of one to two semesters of full-time study.
 - The primary purpose must be to provide a set of learning activities which are designed to enable students from disadvantaged educational backgrounds to perform successfully in their chosen fields of study.
 - The components into which the foundation provision is divided must be formal courses, i.e. courses which count as credits towards the award of the formal qualification. Each of these courses must include specific and identifiable foundational provisions which are relevant to the overall curriculum of the programme.
 - The foundation provision must be formally planned, scheduled, timetabled and regulated as an integral part of the extended programme and of the institution’s formal teaching and learning activities.

6. HEMIS CRITERIA

Various definitions in HEMIS are required to understand the first step to be taken by a university, namely obtaining the approval of programmes offering foundation provision.

All foundation students should be reported in HEMIS. Foundation students who are not reported in HEMIS will not be taken into account for state funding.

According to the HEMIS definition of a census date, a university sets the census date of capturing enrolled students between a third and two-thirds of the duration of a course. There is therefore flexibility built into HEMIS in order to accommodate the identification and registration of foundation students, in order to capture foundation students in HEMIS.

Foundation student data recorded in HEMIS will be audited by external auditors as part of the normal processes of a university submitting an audit report of HEMIS data to the Department.

Within HEMIS, a *foundation student* is defined as a student who must satisfy both of the following conditions:

- He/she must meet the minimum statutory requirements for entrance into Higher Education;
- He/she must be enrolled for an extended curriculum programme approved by the Department for foundation provision and which forms part of the institution's formal degree/diploma programme. Note that a formal degree/diploma programme includes only those qualifications which have been accredited by the HEQC and whose introduction has been approved by the relevant government authority.

The HEMIS definition of a *foundation course* is a formal course which forms an integral part of an extended curriculum programme and of which at least 50% is foundational in nature and additional to the material prescribed for the corresponding regular course.

The definition, layout and structure of an extended curriculum programme noted in the HEMIS definition of a foundation student are described in the following section.

7. REFLECTING HEMIS CREDIT VALUES, FTEs AND CESMs FOR THE APPROVAL OF AN EXTENDED CURRICULUM PROGRAMME

As part of the formal approval of any degree or diploma programme, credit values have to be assigned to courses or modules and reflected in the application for the approval of a university programme. This practice of assigning credit values also applies in the case of foundation courses or modules within an extended curriculum programme. Normal HEMIS rules must be applied when credit values are calculated for extended curricula, which by definition contain combinations of foundation and regular courses.

The calculation of credit values depends on the model of foundation courses that are used and the structure and layout of the extended programme in which they are located. The following sub-sections set out the types and models of foundation courses and extended programmes that can qualify for state funding. These types and models are approved because they meet the definitions for foundation provision given in this document, are deemed to serve the interests of the students, and ensure that foundation funding relates to the costs of its provision and is objectively allocated.

7.1 Models of foundation courses (or modules)

Foundation courses (or modules²), with their credit values, are the units used to calculate state funding for foundation provision. It is therefore essential that foundation courses that are put forward for state funding should meet the HEMIS definition given in section 5, that is, “a formal course which forms an integral part of an extended curriculum programme and of which at least 50% is foundational in nature and additional to the material prescribed for the corresponding regular course.” An approved foundation course attracts funding in two forms: (a) regular teaching input subsidy derived from its credit value, subject category and enrolment, as is the case for regular courses; and (b) foundation grant funding, also on the basis of credit value, subject category and enrolment but calculated in a different way. See the funding policy of foundation provision.

Foundation courses can follow various models that are valid for different educational purposes and target groups. The four models are:

- **Model 1: a “fully foundational” course.** The most common form of this is a course that is preparatory to the regular first-level course in the subject(s) concerned. In other words, foundation students complete this kind of course before proceeding to the regular first-year course in the subject concerned.

Courses of this kind are commonly used in cases where the foundation students are very underprepared for the regular curriculum and are deemed to need extensive foundational teaching before they undertake the traditional first-year level. They are most commonly used in STEM (science, technology, engineering and mathematics) subjects, which are strongly cumulative or hierarchical in content knowledge and in which students cannot advance successfully to a higher level without thorough mastery of the concepts and practices covered at the level below.

An alternative form is a course that provides foundational preparation for a range of cognate subjects or for a programme as a whole. Examples might be “Foundations of argument in the Social Sciences” and “Introduction to scientific thinking”. To qualify for foundation funding, such a course must be additional to the material prescribed for the regular curriculum, not a replacement for a regular course.

² The terms ‘course’ and ‘module’ are regarded in this document as having the same meaning, i.e. a unit of provision that is assessed. In the interests of brevity, the term ‘course’ is used.

- Model 2: an “**extended**” course, which combines regular course material with substantial foundational material and is substantially longer in duration than the corresponding regular course. An example of an extended course in, for example, Mathematics is a course that covers the same content as a semester Mathematics course but is taught over the full year – incorporating substantial foundational provision – with the same contact time (say 5 contact periods) per week as the regular course. The extended course would thus involve about twice as much staff time and notional learning hours as the regular semester course.

Courses of this kind are commonly used in cases where the students need substantial foundational intervention but can cope with the introduction of regular first-year content, provided that the necessary foundational preparation is effectively done. An advantage of this model is that foundation students can take the same number of *subjects* as a regular first-year student, but they will by design take substantially longer (commonly an additional year) to complete the regular first-year curriculum. A risk is that, if complexity and pace are not progressively increased during an extended course, there is likely to be an articulation gap between extended provision and the regular second-year courses that follow.

- Model 3: an “**augmented**” course, which covers all the material of a regular course and has the same duration, but is taught separately and integrates substantial foundational material through additional formally-timetabled contact time. To meet the definition of a foundation course, the contact time of an augmented course must be approximately double that of the regular course. An example of an augmented course in Mathematics is a course that covers the same content as the regular Mathematics 1 but uses twice as much contact time (say 10 contacts) per week in order to incorporate substantial foundation work. The augmented course would thus also involve about twice as much staff time and notional learning hours as the corresponding regular course.

Courses of this kind are commonly used in cases where the students can cope with the introduction of regular first-year content in the early stages of the programme but still need substantial foundational scaffolding as well as more time on task. They are particularly appropriate in programmes that are founded on well-defined disciplinary building-blocks: for example, **Engineering degrees where Mathematics and Physics** are key foundational elements. This model provides for intensive teaching but, because of this, the number of subjects taken at the same time must be substantially reduced, usually halved. Foundation students taking augmented courses will thus also take substantially longer (up to an additional year) to complete the regular first-year curriculum. Moreover, the extended curriculum must be designed to ensure that there are no unduly long breaks between successive courses in the same subject (for example, between Mathematics 1 Augmented and Mathematics 2).

- Model 4: an “**augmenting**” course, which allows for the foundational elements of an augmented course to be provided as a separate (but integrally linked) course or module. This kind of course thus provides for a variant of Model 3 that can be

applied productively in certain subject areas and circumstances. The nature of the variant is as follows.

By definition, an augmented course (model 3) must be taught separately, with its regular and foundational material fully integrated; this remains the educationally preferable model because it provides a high degree of flexibility in meeting student needs. There are, however, some cases where the nature of the subject – particularly **social science and humanities disciplines** that are not ‘cumulative’ in the same way as the STEM disciplines – makes it possible for underprepared students to participate productively in regular lectures. Particularly where a foundation course in such a subject also has low enrolment, it is acceptable to provide foundational intervention in the form of a separate, adjunct course that is fully linked to the regular course and provides the substantial foundational material that would be offered in an augmented course.

Since the regular material would be delivered separately, the content of an augmenting course would be fully foundational.

The augmenting course model will be recognised from 2013. By its nature, it requires careful regulation to ensure adherence to the principles of foundational provision and the effective use of foundation grant funding. For example, an augmenting course must be distinguished from a supplemental tutorial model in that it must offer substantial foundational provision as defined in section 5, provided by qualified academic staff rather than student tutors.

An augmenting course will thus be recognised as a foundation course if it meets all the following criteria:

- Like any other foundation course, it must form an integral part of an approved extended curriculum programme.
- Full motivation for the need for an augmenting rather than an augmented course must be provided, with particular reference to the compatibility of the subject matter with this approach. **The augmenting course model is not appropriate for subjects of a ‘cumulative’ nature such as STEM disciplines**, so is likely to be confined to extended BA and BSocSc programmes.
- It must be integrally linked to a specific regular course that forms part of the extended curriculum programme.
- To distinguish it from the ‘additional tutorial’ model, it must provide substantial foundational support and additional contact time equivalent to between 60% and 100% of the contact time allocated to the regular course to which it is linked, and must be taught by properly qualified academic staff.
- As in the case of a fully foundational course, it cannot replace any regular course in the extended curriculum programme.
- It must be administered, coded, timetabled and examined in the same way as any other course in the programme.

7.2 Models of extended curriculum programmes

Possible uses of the course models are explained in this section through detailed examples of what is involved in applying HEMIS rules. In each example, the Ministerially-approved formal time for the qualification is 3 years, and the extension is by one year. The assignment of credit values to courses involves determining what share each course has of the total curriculum, and expressing these shares as fractions of the total *formal* time, which in each of these cases is 3. The credit values for the individual courses are not unique and could vary from university to university.

The symbols used in the examples indicate the following:

- F = foundation course: see definition in section 6
- R = regular course
- 100, 101 etc = first level course
- 200 = second level course
- 300 = third level course
- A, B, C, D, E = names of subjects

FTE enrolled foundation students are generated by: (head count enrolment in foundation course) multiplied by (credit value of course). Student headcount enrolment for each course included in the curriculum of this formal qualification in academic year N is reflected. In the case of historical data, the head count enrolments must be those on the census dates specified in HEMIS rules. In the case of forward projections, the head count enrolments would have to be reasonable estimates of what enrolments are expected to be in a given academic year.

The HEMIS classification of educational subject matter (CESM) category of each course in the extended curriculum programme has to be reflected in order to allow the Department to calculate weighted FTE students for planning and funding purposes.

Model 1: Extended curriculum incorporating a “fully foundational year”

Figure 1 gives a simplified outline of a BSc degree with an extended curriculum comprising a full year of foundation courses followed by the regular curriculum. Figure 1 is presented in this document merely to help university staff to grasp at a glance how extended curricula in Model 1 can actually work.

FIGURE 1

<i>Three-year undergraduate qualification with curriculum extended by a full academic year of foundation courses</i>								
Academic year	Required courses					Credit values in year		
						Foundation	Regular	Total
Year 1	FA101	FB101	FC101	FD101	FE101	0.75	0	0.75
Year 2	RA100	RB100	RC100	RD100	RE100	0	0.75	0.75
Year 3	RA200	RB200	RC200			0	0.75	0.75
Year 4	RA300	RB300				0	0.75	0.75
Total credits in curriculum						0.75	2.25	3.0

Points to note about Figure 1 are these:

- The credit value of 3.0 of the programme as a whole is spread evenly over the four years. To accommodate the allocation of credit to the foundation courses, the credit values of the regular courses in the extended programme are somewhat lower than they would be in the regular programme. The university would have to make separate calculations of the credit values of courses which appear in regular programmes.
- The example assumes that the shares which the courses have of the approved credit value of the extended programme (which is 3) are:

each foundation course = 0.150

each regular 100-level course = 0.150

each 200-level course = 0.250

each 300-level course = 0.375

- The totals for foundation and regular courses in Figure 1 show that the sum of the credits assigned to the courses is 3, that foundation courses have a credit total of 0.75 and regular courses a credit total of 2.25.

Should a university decide to use Model 1, then Table 1 below is an example of the format and detailed information which a university has to formally submit to the Department of Higher Education and Training in its application for the approval of its proposed extended curriculum programme. Table 1 also illustrates how the FTE enrolled student numbers should be calculated for specific headcount enrolments.

TABLE 1

Three-year undergraduate qualification with curriculum extended by a full academic year of foundation courses					
Course title	Course name	CESM	Head count enrolment in course in year N (Y)	Credit value of course (K)	FTE enrolled students (YxK)
Foundation courses					
YEAR 1					
FA101	Mathematics 1A	15	200	0.150	30.00
FB101	Physics 1A	14	200	0.150	30.00
FC101	Chemistry 1A	14	200	0.150	30.00
FD101	Introduction to scientific thinking	17	200	0.150	30.00
FE101	Biology 1A	11	200	0.150	30.00
Total of all foundation courses				0.750	150.00
Regular courses					
YEAR 2					
RA100	Physics 100	14	180	0.150	27.00
RB100	Mathematics 100	15	180	0.150	27.00
RC100	Chemistry 100	14	160	0.150	24.00
RD102	Applied Maths 100	15	150	0.150	22.50
RE102	Applied Chemistry 100	14	150	0.150	22.50
YEAR 3					
RA200	Physics 200	14	120	0.250	30.00
RB200	Mathematics 200	15	120	0.250	30.00
RC200	Chemistry 200	14	110	0.250	27.50
YEAR 4					
RA300	Physics 300	14	100	0.375	37.50
RB300	Mathematics 300	15	90	0.375	33.75
Total of all regular courses				2.250	281.75
GRAND TOTAL FOR ALL COURSES				3.000	431.75

Points to note about Table 1 are these:

- The same points noted below Figure 1 apply to Table 1.
- Provision should be made for attrition in student heads from one academic year to the next as reflected in Table 1.
- This extended curriculum programme has in year N an enrolment of 150 FTE students in its foundation courses, and 281.75 FTE students in its regular courses. The separation of these totals is important because planning and the distribution of earmarked funds amongst universities will eventually be based on approved totals of FTE enrolled students in approved foundation courses.

Model 2: Regular first-year curriculum taken over two years with incorporation of substantial foundational provision

Figure 2 gives a simplified outline of a BCom degree with an extended curriculum in which the content of the regular first-year curriculum is taken over two years, interwoven with substantial foundational work in both years. Figure 2 is presented in this document merely to help university staff to grasp at a glance how extended curricula in Model 2 can actually work. The courses in Years 1 and 2 are all extended courses.

FIGURE 2

<i>Three-year undergraduate qualification with regular first-year curriculum extended over two years with incorporation of foundational provision</i>								
Academic year	Required courses					Credit values in year		
						Foundation	Regular	Total
Year 1	FA101	FB101	FC101	FD101		0.5	0	0.5
Year 2	FA102	FB102	FC102	FD102		0.5	0	0.5
Year 3	RA200	RB200	RC200			0	1.0	1.0
Year 4	RA300	RB300				0	1.0	1.0
Total credits in curriculum						1.0	2.0	3.0

Points to note about Figure 2 are these:

- All the 100-level courses combine regular subject matter with foundational work, in approximately equal proportions. The full regular first-year curriculum will have been completed by the end of Year 2. The courses thus fall into the “extended course” category of foundation provision.
- The credit distribution takes into account that the credit value of the foundation courses cannot exceed 1 (see section 4). In this example, the shares which the courses have of the total credit value of the programme are taken as:

each 100-level course = 0.125
 each 200-level course = 0.33
 each 300-level course = 0.50

- This model allows the credit values of the 200- and 300-level courses to be the same as in the regular curriculum.
- The totals in the credit value column of Figure 2 show that the sum of the credits assigned to the courses is 3, that foundation courses have a credit total of 1.0 and standard courses a credit total of 2.0.

Should a university decide to use Model 2, then Table 2 below is an example of the format and detailed information which a university has to formally submit to the Department of Higher Education and Training in its application for the approval of its proposed extended curriculum programme. Table 2 also illustrates how the FTE enrolled student numbers should be calculated for specific headcount enrolments.

TABLE 2

Three-year undergraduate qualification with regular first-year curriculum extended over 2 years with incorporation of foundation provision					
Course title	Course name	CESM	Head count enrolment in course in year N (Y)	Credit value of course (K)	FTE enrolled students (YxK)
Foundation courses					
YEAR 1					
FA101	Mathematics 1A	15	300	0.125	37.500
FB101	Accounting 1A	04	300	0.125	37.500
FC101	Computing 1A	06	300	0.125	37.500
FD101	Management 1A	04	300	0.125	37.500
YEAR 2					
FA102	Mathematics 1B	15	225	0.125	28.125
FB102	Accounting 1B	04	225	0.125	28.125
FC102	Computing 1B	06	225	0.125	28.125
FD102	Management 1B	04	225	0.125	28.125
Total of all foundation courses				1.000	262.500
Standard courses					
YEAR 3					
RA200	Accounting 200	04	190	0.333	62.700
RB200	Computing 200	06	190	0.333	62.700
RC200	Management 200	04	190	0.333	62.700
YEAR 4					
RA300	Accounting 300	04	170	0.500	85.000
RB300	Management 300	04	170	0.500	85.000
Total of all regular courses				2.000	358.100
GRAND TOTAL FOR ALL COURSES				3.000	620.600

Points to note about Table 2 are these:

- The same points noted below Figure 2 apply to Table 2.
- Provision should be made for attrition in student heads from one academic year to the next as reflected in Table 2.
- This extended curriculum programme has in year N an enrolment of 262.5 FTE students in its foundation courses, and 358.1 FTE students in its regular courses. The separation of these totals is important because planning and the distribution of earmarked funds amongst universities will eventually be based on approved totals of FTE enrolled students in approved foundation courses.

Model 3: Regular first-year curriculum taken over two years with combination of foundational and regular courses

Figure 3 gives a simplified outline of a BCom degree with an extended curriculum. Model 3 is a variant of Model 2. The content of the regular first-year curriculum is taken over two years through a combination of foundation and regular courses. Figure 3 is presented in this document merely to help university staff to grasp at a glance how extended curricula in Model 3 can actually work.

FIGURE 3

<i>Three-year undergraduate qualification with regular first-year curriculum extended over two years through combination of foundational and regular courses</i>								
Academic year	Required courses					Credit values in year		
						Foundation	Regular	Total
Year 1	FA101	FB101	FC101	FD101		0.50	0	0.5
Year 2	FA102	FB102	RC102	RD102		0.25	0.25	0.5
Year 3	RA200	RB200	RC200			0	1.0	1.0
Year 4	RA300	RB300				0	1.0	1.0
Total credits in curriculum						0.75	2.25	3.0

Points to note about Figure 3 are these:

- Model 3 differs from Model 2 in that, while subjects A and B utilise “extended courses” in Years 1 and 2, regular (e.g. one-semester) courses have been included in Year 2 for subjects C and D. Thus this curriculum correctly generates a lower foundation credit value than Model 2 since less foundation provision is needed.
- The credit value totals in Figure 3 show that the sum of the credits assigned to the courses is 3, that foundation courses have a total weighting of 0.75 and standard courses a total weighting of 2.25.

Should a university decide to use Model 3, then Table 3 below is an example of the format and detailed information which a university has to formally submit to the Department of Higher Education and Training in its application for the approval of its proposed extended curriculum programme. Table 3 also illustrates how the FTE enrolled student numbers should be calculated for specific headcount enrolments.

TABLE 3

Three-year undergraduate qualification with regular first-year curriculum extended over two years through combination of foundational and regular courses					
Course title	Course name	CESM	Head count enrolment in course in year N (Y)	Credit value of course (K)	FTE enrolled students (YxK)
Foundation courses					
YEAR 1					
FA101	Mathematics 1A	15	300	0.125	37.500
FB101	Accounting 1A	04	300	0.125	37.500
FC101	Computing 1A	06	300	0.125	37.500
FD101	Management 1A	04	300	0.125	37.500
YEAR 2					
FA102	Mathematics 1B	15	225	0.125	28.125
FB102	Accounting 1B	04	225	0.125	28.125
Total of all foundation courses				0.750	206.250
Standard courses					
YEAR 2					
RC102	Computing 1B (reg)	06	225	0.125	28.125
RD102	Management 1B (reg)	04	225	0.125	28.125
YEAR 3					
RA200	Accounting 200	04	190	0.333	63.270
RB200	Computing 200	06	190	0.333	63.270
RC200	Management 200	04	190	0.334	63.460
YEAR 4					
RA300	Accounting 300	04	170	0.500	85.000
RB300	Management 300	04	170	0.500	85.000
Total of all regular courses				2.250	416.250
GRAND TOTAL FOR ALL COURSES				3.000	622.500

Points to note about Table 3 are these:

- The same points noted below Figure 3 apply to Table 3.
- Provision should be made for attrition in student heads from one academic year to the next as reflected in Table 3.
- This extended curriculum programme has in year N an enrolment of 206.25 FTE students in its foundation courses, and 416.25 FTE students in its regular courses. The separation of these totals is important because planning and the distribution of earmarked funds amongst universities will eventually be based on approved totals of FTE enrolled students in approved foundation courses.

Model 4: Using “augmenting” courses

Model 4 is similar to Models 2 and 3 in that the content of the regular first-year curriculum is taken over two years. The difference is that there is a combination of augmenting and regular courses. This model is appropriate for a BA or BSocSc but not for STEM or other programmes composed mainly of “cumulative” disciplines.

Figure 4 gives a simplified outline of a BA degree with an extended curriculum. Figure 4 is presented in this document merely to help university staff to grasp at a glance how extended curricula in Model 4 can actually work.

FIGURE 4

Three-year undergraduate qualification with regular curriculum extended by the addition of augmenting and fully foundational courses in Years 1 and 2

Academic year	Required courses					Credit values in year		
						Foundation	Regular	Total
Year 1	RA100 regular course 0.20	FA101 augment -ing crse 0.10	RB100 regular course 0.20	FB101 augment -ing crse 0.10	FX101 Quantitative Literacy 0.10	0.30	0.40	0.70
Year 2	RA200 0.30	RC100 regular course 0.20	FC101 augment -ing crse 0.10	FY101 Foundations of Logic 0.10		0.20	0.50	0.70
Year 3	RA300 0.40	RC200 0.30	RD100 0.20			0	0.90	0.90
Year 4	RC300 0.40	RD200 0.30				0	0.70	0.70
Total credits in curriculum						0.50	2.50	3.00

Points to note about Figure 4 are these:

- The three regular 100-level courses taken in Years 1 and 2 of this extended BA/BSocSc are each complemented by an “augmenting” course that meets the definition of this category, including having contact time of at least 60% that of the relevant regular course. The augmenting courses have their own codes (and are assessed separately from the regular course) but are integrally linked with the regular course concerned and cannot stand alone.
- In this case there are two broad preparatory courses taken in Years 1 and 2. They are additional to the regular curriculum and thus qualify as fully foundational courses.
- The regular courses in this extended programme fulfil all the requirements of the regular curriculum, comprising four 100-level, three 200-level and two 300-level full-year courses (i.e. two majors).
- The total credit value of the foundational courses is 0.5 which is the lowest value allowed. However, the costs of mounting the foundation provision will not be high, given that the foundation students will attend the regular lectures in most of their courses.

Should a university decide to use Model 4, then Table 4 below is an example of the format and detailed information which a university has to formally submit to the Department of Higher Education and Training in its application for the approval of its proposed extended curriculum programme. Table 4 also illustrates how the FTE enrolled student numbers should be calculated for specific headcount enrolments.

TABLE 4

Three-year undergraduate qualification with regular curriculum extended by the addition of augmenting and fully foundational courses in Years 1 and 2					
Course title	Course name	CESM	Head count enrolment in course in year N (Y)	Credit value of course (K)	FTE enrolled students (YxK)
Foundation courses					
YEAR 1					
FA101	Psychology 1 augmenting course	18	300	0.100	30.000
FB101	Sociology 1 augmenting course	20	300	0.100	30.000
FX 101	Quantitative Literacy foundation	11	300	0.100	30.000
YEAR 2					
FC101	English 1 augmenting course	11	225	0.100	22.500
FY101	Foundations of Logic	17	225	0.100	22.500
Total of all foundation courses				0.500	135.000
Regular courses					
YEAR 1					
RA100	Psychology 1	18	300	0.200	60.000
RB100	Sociology 1	20	300	0.200	60.000
YEAR 2					
RA200	Psychology 2	18	225	0.300	67.500
RC100	English 1	11	225	0.200	45.000
YEAR 3					
RA300	Psychology 3	18	190	0.400	76.000
RC200	English 2	11	190	0.300	57.000
RD100	Social Anthropology 1	20	190	0.200	38.000
YEAR 4					
RC300	English 3	11	170	0.400	68.000
RD200	Social Anthropology 2	20	170	0.300	51.000
Total of all regular courses				2.500	522.500
GRAND TOTAL FOR ALL COURSES				3.000	657.500

Points to note about Table 4 are these:

- The same points noted below Figure 4 apply to Table 4.

- Provision should be made for attrition in student heads from one academic year to the next as reflected in Table 4.
- This extended curriculum programme has in year N an enrolment of 135.00 FTE students in its foundation courses, and 522.50 FTE students in its regular courses. The separation of these totals is important because planning and the distribution of earmarked funds amongst universities will eventually be based on approved totals of FTE enrolled students in approved foundation courses.

Various other extended programme models can be and are used, including models that spread the regular first and second years over three years or make use of more modular designs. The examples given here are intended only to illustrate some alternative approaches to credit allocation.

8. THE APPROVAL OF EXTENDED CURRICULUM PROGRAMMES

The approval of extended curriculum programmes is a crucial first step, after which foundation students can be reflected in HEMIS and funded by the state.

A template of the required format for the approval of extended curriculum programmes is provided.

Applications for foundation grants must follow the format outlined below.

- Name of university.
- Titles of programmes for which funds are requested; indicating whether these are (a) current programmes already offered, or (b) new programmes to be offered, or (c) an amended programme in which more than 50% of the content, layout and structure has changed.
- For each programme, the following academic information must be provided:
 - title of the formal (Departmentally-approved) qualification for which students in the programme will be registered;
 - the approved formal time (in years) of the qualification;
 - criteria to be used in admitting students to the extended curriculum programme and the related regular programme;
 - an outline of regulations for the qualification, including the minimum study period for foundation students and the courses that should be taken in each year of study;
 - for each of the foundation courses in the curriculum, the category of the course (referring to the models in section 7.1), a brief explanation of how the course fits the category, and a brief outline of the contents;
 - a tabular outline, along the lines of the programme tables in Section 7.2, reflecting course codes, course names, the credit values and CESM categories of foundation courses, the credit values of regular courses included in the curriculum, student head count and student FTE enrolments in each course in the curriculum for a particular academic year;
 - the numbers of FTE foundation students for which funding is requested and the year of implementing a new programme.
- The following resource information must be provided for each programme:

- number and minimum rank of academic staff to be involved in teaching foundation courses in the curriculum;
- the full-time equivalent (FTE) value of the academic staff involved in teaching foundation courses in the curriculum;
- number of administrative and/or support staff attached to the programme;
- facilities to be made available for foundation courses; e.g. study spaces, laboratories, personal computers;
- the use to which an approved foundation allocation would be put.
- Applications must be submitted in electronic format, signed by the Vice-Chancellor, the Registrar or the Deputy Vice Chancellor: Academic.

Applications will be assessed by a reference group consisting of members of the Department of Higher Education and Training and a panel of external experts from the university sector appointed by the Minister. This reference group will formulate recommendations to the Minister.

Since the Department has moved away from fixed triennium periods after which universities have to resubmit all of their extended curriculum programmes for re-evaluation and approval, those programmes approved in 2012 will remain approved and funded in future years up until notification of termination of such a programme is provided.

From 2013, a university must give formal notice to the Department if it intends to discontinue a Departmentally-approved extended curriculum programme.

Universities are allowed to annually submit proposals for new extended curriculum programmes to be approved for state funding.

A university must resubmit for approval an amended extended curriculum programme in which more than 50% of the content, layout and structure has changed.

9. ENROLMENT PLANNING

FTE enrolled foundation students are weighted according to 4 groups of CESM categories set out in Table 5. This is required for enrolment planning and eventually to distribute earmarked foundation funds.

TABLE 5

Funding group	BROAD SUBJECT CATEGORIES (CESMs) FOR FOUNDATION COURSES
1	07 education, 12 law, 18 psychology, 19 public administration and services
2	04 business, economics & management studies, 05 communication & journalism, 06 computer & information sciences, 11 languages, linguistics & literature, 17 philosophy, religion and theology, 20 social sciences
3	02 architecture & the built environment, 08 engineering, 10 family ecology & consumer sciences, 15 mathematics & statistics
4	01 agriculture & agricultural operations, 03 visual and performing arts, 09 health professions & related clinical sciences, 13 life sciences, 14 physical sciences

The weightings of these 4 groups for funding purposes are as follows:

Funding Group 1: weighting of 1.0
 Funding Group 2: weighting of 1.5
 Funding Group 3: weighting of 2.5
 Funding Group 4: weighting of 3.5

This implies that in the examples, the total FTE students in each of the 3 groups can be multiplied by these weightings, and then added up in order to obtain the total weighted FTE enrolled students for a university.

The total of the weighted FTE enrolled foundation students is useful to plan for student enrolment in future years, but remains a rough indicator. Audited HEMIS data in which the more complicated 2% test has been applied to determine final FTE enrolled foundation students remains the most reliable indicator, but has the disadvantage of always reflecting historical student data.

The following are examples of what is taken into account in determining a university's planned weighted FTE foundation enrolment for future years:

- The historical performance of a university in achieving head count and unweighted FTE enrolment targets for foundation students set by the university and agreed upon by the Department. Audited historical data recorded in HEMIS and the universities' progress reports will be used;
- Historical success rates of foundation students in foundation courses and in regular courses, using the universities' progress reports;
- The distribution/spread of foundation students in the 4 weighting groups noted above; and
- The % share of foundation student enrolment that was approved, versus the history of the % over-enrolment of students in the teaching input sub-block grant.

Total planned weighted FTE foundation students for the teaching input sub-block grant per university will ultimately also be used to distribute earmarked funds for foundation students amongst universities.

10. TEACHING DEVELOPMENT

In line with requirements from the Auditor-General for the transfer of earmarked, or ring-fenced, state funds, institutional visits of staff of the Department who focus on academic/teaching development will take place. These staff will evaluate the quality and value for money of Departmentally approved extended curriculum programmes and their related courses or modules, and report back to the Minister and the Auditor-General.

Universities should therefore keep records of the layout and structures of extended curriculum programmes presented in the yearbook/prospectus/calendar, processes to ensure that foundation provision articulates with the content of regular courses, internal procedures to route students into the extended curriculum, details of the staff involved in the process to select/identify foundation students, proof of tests which students had to undergo to determine students at risk of dropping out, timetables of foundation courses, class lists of foundation students, student assignments, tests and exams and the associated marks/results per foundation student, details of staff that were involved in instructing foundation students, such as their employment status, qualifications and experience, and the details of the spending of ring-fenced state funds that were transferred to the university.

Written evaluations by foundation students when the students evaluate the instruction staff and the academic content of foundation courses during or at the end of the course would also assist tremendously. A part of the assessment of the Department could include random interviews with former foundation students identified on class lists to discuss the benefits and drawbacks experienced during the foundation provision phase of their studies.