Introduction

The higher education system in Flanders comprises 8 universities and 29 non-university higher education institutions (colleges of higher education: hogescholen). Furthermore, there is a Royal Military Academy and a Protestant Theological Faculty in Brussels. Although higher education in Flanders is divided into university education and non-university education, it is questionable whether the Flemish system is a genuine example of the binary model.

Universities

The universities offer two-cycle education with the possibility of a third, doctorate’s cycle.

- First cycle (kandidaats): a candidate’s degree is obtained after a basic training of 2 to 3 years.
- Second cycle (licentiaat): a Master's degree is awarded after an advanced training of 2 to 3 years, and even longer in some fields (or the degree of civil engineer, physician, etc).
- Doctorate’s cycle: a doctoral degree can only be obtained by publicly defending a doctoral thesis (at least two years after obtaining a licentiate’s degree, or a two-cycle non-university higher education diploma in commercial sciences or commercial engineering).

Colleges

Colleges offer one-cycle and two-cycle education. Courses of one-cycle (3 years) have a strictly vocational nature, whereas two-cycle courses are based on scientific knowledge and prepare for executive tasks of a highly scientific and technical character:

- First cycle (kandidaats): a degree is obtained after a basic training of 2 years.
- Second cycle (licentiaat): a degree is obtained after an advanced training of 2 to 3 years.

In 1994 a governmental degree on higher education stipulated that two-cycle non-university education is on an academic level (Ministerie van de Vlaamse gemeenschap, 1994). Contrary to graduates of one-cycle colleges who get the degree gegradueerde, graduates of the two-cycle colleges obtain the terminal degree of licentiaat. Furthermore, it is ordained that the non-university course in commercial science (handelswetenschappen) has the same status as the university course in applied economy (toegespaste economie). So, in a way, the structure of the Flemish system of higher education is tripartite. This triple structure is reflected in the organisation of the Flemish Education Council (VLOR) which was established by the government of Flanders in 1990. The VLOR is compromised of a general and a number of individual councils (elementary education, secondary education, higher education and adult education). The council of
higher education incorporates departments for college education of one-cycle, college education of two-cycles, and university education.

**Input**

Traditionally in Flanders, and previously in all of Belgium, access to higher education is open for everyone who possesses a secondary education diploma. An exception is made for students who have had a secondary vocational training. These students have to take additional courses (one school year) in order to gain access to universities or colleges. In addition to that there are other exceptions to the open access principle.

An entrance exam is required for a number of university and college programmes. For university programmes, an entrance exam is required in civil engineering and engineering-architecture, and in medicine and dentistry. For college courses, an artistic entrance exam is required for audio-visual and visual arts, music, dramatic arts, and an aptitude test is required for nautical science.

Besides these limitations to open access, the Belgian federal government decided that the number of physiotherapists who will get permission to practice will be limited to 270 in 2003, 2004 and 2005. But, as yet, the Flemish government has not limited the intake of first-year students, for instance by establishing a *numerus clausus* for the physiotherapy programme.

Although the entrance exams limit the free choice of students to a certain extent, the access to higher education is quite open in Flanders. It is interesting to note, however, that this freedom of choice leads to an enrolment per discipline which does not contrast with enrolment patterns in other European countries.

In addition to the secondary school-leaving certificate, the following qualifications give entrance to universities and colleges. Certified students of one-cycle non-university education and students who have passed the examinations of the first cycle of a two-cycle course can obtain the university *kandidaats* degree after passing a specific training programme equivalent to at least one year of full-time study. Holders of a college candidate-degree in commercial science or a candidate-engineer in commercial economics (*kandidaat-handelsingenieur*) can move directly to the university degree courses of the second cycle in the field of (applied) economics. Furthermore, there are general rules regarding the transfer of the holders of a final certificate of the two-cycle higher education to university degree courses (bridging courses).

Two-cycle colleges grant access to holders of qualifications of the first cycle of a related basic education of academic level or to holders of qualifications of the first cycle of a related academic education.

Table 9.1 gives an overview of the student numbers in the Flemish higher education system.

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4 If a candidate fails, the number of resits is unlimited.
Structural characteristics

Degrees, programmes and cycles

University education usually consists of two cycles. The first cycle which lasts two years (for most courses) is a basic training with introductory courses related to the chosen field of study, methodological subjects and a number of auxiliary sciences. The main focus is on formal theory to provide students with basic theoretical knowledge. Starting in the second year, however, there are already a number of more specific options to prepare students for the next level of studies. Successful completion of the first cycle leads to the title of kandidaat.5 With regard to the duration of the first cycle there are a few exceptions: medicine, theology and veterinary science take three years. The second (university) cycle lasting between two and three years (for most courses), provides more in-depth and specialised scientific training. Students have a lot of leeway in the selection of their courses and much priority is given to individual and group work (seminars). Examinations are held at the end of the second cycle and students have to submit a thesis on a subject central to their area of study. After a successful completion of the second cycle students obtain the (usually terminal) degree of licentiaat, although several courses lead to titles like ‘Commercial Engineer’, ‘Physician’ (medical practitioner), ‘Veterinarian’, ‘Dentist’, ‘Pharmacist’, ‘Civil Engineer’, ‘Civil Engineer-Architect’ or ‘Bio-Engineer’. Concerning the duration of the second cycle there is one exception: the course in medicine takes four years.

The doctorate is the highest degree of specialisation at the academic level. Obtaining this degree takes at least two years of additional study, but in reality normally three to four years of study are required. The degree is based on original research leading to the presentation of a doctoral thesis. Most institutions also require participation in an additional doctoral programme covering a number of courses, seminars, and congresses relating to the chosen specialisation. Successful completion leads to the degree of doctor. In addition to students with a university degree, the following students have access to the doctorate cycles of universities: students of two-cycle colleges with a degree in commercial science and students who have obtained the degree of engineer in commercial economics, students with a degree of graduate engineer-politechnician (a licentiate granted by the Royal Military Academy) and students with a diploma of a foreign university or other institution of higher education, if the university board accepts its equivalence. Sometimes, holders of such a diploma need to pass an entrance examination (doctum colloquium).

Table 9.1: Student numbers at universities and hogescholen

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>49,476</td>
<td>48,535</td>
<td>48,806</td>
<td>49,303</td>
<td>52,691</td>
<td>55,237</td>
<td>58,467</td>
</tr>
<tr>
<td>Hogescholen</td>
<td>69,402</td>
<td>74,759</td>
<td>79,721</td>
<td>82,149</td>
<td>84,858</td>
<td>90,531</td>
<td>94,140</td>
</tr>
</tbody>
</table>

5 In the fields of philosophy, ethics, theology, Roman-Catholic religious studies and Canon Law, qualifications and this level are referred to as baccalaurus.
Non-university higher education is divided in two-cycle courses on an academic level and one-cycle courses with a strict vocational character.

The first cycle of two-cycle courses lasts two years and leads to the degree of *kandidaat*, whereas the second cycle lasts two or three years. The final degrees, awarded after a successful completion of the second cycle, are *licentiaat* and professional titles like ‘commercial engineer’ or ‘industrial engineer’.

Two-cycle education at college-level is directed towards the application of sciences, independent thinking and the development of creativity. The aim of these programs is to prepare students for executive tasks of a highly scientific and technical character.

One-cycle courses take three years and lead to degree of *gegradueerde*. The courses comprise theoretical lessons, practical lessons, fieldwork and apprenticeships. The aim of one-cycle higher education is to teach students professional skills.

**Intermediary qualifications**

The Flemish higher education system lacks intermediate qualifications, although within universities and two-cycle colleges the degree of candidate is awarded after the first cycle. These diplomas are no more than an indication of the successful completion of a fixed number of courses required to enter the second cycle. They are not recognised as qualifications on the labour market (Schrier and Kaiser, 1998).

**Academic versus professional programmes**

In Flanders the higher education sector is divided into academic and professional programmes. This division, however, is not a cleavage between university and college education, but a division between two-cycle and one-cycle college education. The Flemish legislation considers two-cycle courses as academic and one-cycle courses as vocational. Before 1994 one-cycle and two-cycle non-university higher education were offered in separate institutions, the so-called non-university education of the short type (*hoger onderwijs korte type*; HOKT) and non-university education of the long type (*hoger onderwijs lang type*; HOLT). Over 135 HOKT and 26 HOLT institutions existed. As a result of the introduction of a new funding model in 1994 these institutions had to merge.

Nowadays, HOKT and HOLT programmes are mostly offered in one institution under the name of one-cycle and two-cycle higher education. The more than 160 colleges which existed previously have merged into 29 institutions.

Nevertheless, a clear distinction between two-cycle higher education and university education remains. Universities provide education based on basic scientific research, whereas two-cycle colleges provide education based on scientific knowledge. Furthermore, there is a difference between universities and colleges with regard to the influence of socio-economic organisations on the initial education program. At request of the Minister of Education, the Flemish Education Council (VLOR) co-ordinates the definition of ‘professional profiles’ and accompanying ‘educational profiles’ which should form the foundation for the curricula of the colleges. The definition of these profiles is decided in consultation with representatives of socio-economic organisations (The Social-Economic Council of Flanders). A similar procedure for universities is considered unnecessary.
Co-operation between sectors
Universities and two-cycle colleges are entitled to enter into an agreement with regard to the joint organisation of educational activities, research and social services (scientific services to society). Two-cycle colleges have the competence to conduct applied scientific research, preferably in co-operation with a Flemish or foreign university. As mentioned earlier, transfers between the three types of higher education are possible (see above).

Other system characteristics

Research
Colleges do not have the competence to conduct basic scientific research, as universities have. As mentioned before, colleges with two-cycle courses have some tasks with regard to research and social service. They are allowed to conduct applied scientific research, preferably in co-operation with a university.

Personnel
Teaching posts at colleges are categorised into three groups (Ministerie van de Vlaamse Gemeenschap, 1994):
- practical lecturer (praktijklector), senior practical lecturer (hoofdpraktijklector), lecturer (lector) and senior lecturer (hoofdlector).
- auxiliary staff: assistant (assistent), doctoral assistant (doctor-assistent) and instructor (werkleider).
- assistant professor (docent), associate professor (hoofddocent), professor (hoogleraar) and full professor (gewoon hoogleraar).

The positions of the first group and the second group are solely related to one-cycle courses and two-cycle courses respectively. The third group of positions may be related to both types of courses. The duties of (senior) practical lecturers and (senior) lecturers are to provide education and study guidance, but can also include project-based scientific research, provision of social services and administrative tasks. The auxiliary staff supports assistant professors, associate professors, professors, and full professors of two-cycle courses by carrying out their tasks, viz. education, study guidance and research. In addition to this, the duties of professors also include social services. Assistants are allowed to devote at least half of their time to prepare their doctoral thesis. The minimal legal requirements for teaching posts at colleges are:
- practical lecturer and senior practical lecture: a diploma of one-cycle college education.
- lecturer and senior lecturer: a diploma of two-cycle higher education (college or university).
- assistant and instructor: a diploma of two-cycle higher education (college or university).
- doctoral assistant: a doctoral degree.
- assistant professor, associate professor, professor, and full professor: a doctoral degree.\textsuperscript{6}

An appointment as full professor at a college is only possible when the college involved co-operates with a Flemish university in the disciplinary field concerned. Furthermore, the decree on colleges contains requirements with regard to seniority (i.e. appointments are based on work experiences within certain posts).

Teaching posts at universities are categorised into two groups (Ministerie van de Vlaamse gemeenschap, 1991):
- independent academic staff (zelfstandig academisch personeel): assistant professor (docent), associate professor (hoofddocent), professor (hoogleraar), full professor (gewoon hoogleraar) and extra ordinary professor (buitengewoon hoogleraar).
- auxiliary academic staff: assistant (assistent) and doctoral assistant (doctor-assistent)

The duties of the independent academic staff are to carry out scientific research, to provide education and to provide social services. The auxiliary academic staff has the task to support the independent academic staff. Assistants are entitled to devote at least half of their time to prepare their doctoral thesis, but universities have the option to appoint practical assistants or practical lectures whose only task is to provide education.

The minimal legal requirements for teaching posts at universities are:
- independent academic staff and doctoral assistants: a doctoral degree.\textsuperscript{7}
- assistants: a diploma of a university (licentiate).
- practical assistant or practical lecturers: a diploma of two-cycle colleges education

Furthermore, the university board has the legal obligation to determine additional requirements for the position of associate professors, professors, full professors and extraordinary professors.

\textit{Quality assurance}

The Flemish Decrees on the universities (Ministerie van de Vlaamse gemeenschap, 1991) and the colleges (Ministerie van de Vlaamse gemeenschap, 1994) call for a dual system of quality assurance. First, universities and colleges themselves are responsible for internal and external quality management. Every university or college has to monitor the quality of its educational and research activities continuously and on its own initiative. At least once every five years the educational activities related to one-cycle courses have to be assessed in co-operation with institutions from home and abroad. Largely this

\textsuperscript{6} Additional requirements apply for a number of courses, for instance relevant professional experience (six years) for an appointment as assistant professor, associate professor, professor or full professor in audio-visual and visual arts, music, dramatic arts, architecture and product design.

\textsuperscript{7} In exceptional cases (extraordinarily scientific achievements or specific skills) the university board can deviate from this requirement.
arrangement also applies to the education programmes and research of academic level (two-cycle colleges and universities), except that the cycle of evaluation is not five but eight years. Secondly, the governmental authorities monitor and supervise the management of quality by universities and colleges. At regular intervals, the government examines the operation of external and internal management and monitors how universities and colleges have implemented the quality assessment outcomes in their policies. Furthermore, the government may appoint a committee of independent specialists who conduct a comparative examination into the quality of courses and the research activities of universities.

Most of the colleges quickly established a service department for quality assessment, but there is hardly a systematic form of internal and external evaluation in the non-university higher education sector (www.klasse.be). To this very day the Flemish government is not able to monitor the activities of colleges as formulated in the degree, because sufficient data for evaluations are not available (Verhoeven and Elchardus, 2000). For the one-cycle courses, however, the traditional manner of assessment by the governmental Inspectorate of Higher Education was maintained until 1999. Recently, the Flemish minister of education asked the college sector to develop a framework for external quality control based on the quality assurance system in the university sector (Vanderpoorten, 1999).

The Flemish Inter-University Council (VLIR), acting as an intermediate, co-ordinating institution for quality assurance, has developed a framework for internal and external quality control at the eight universities, in co-operation with the Dutch Association of Universities. Between 1992 and 1996 sixteen disciplines were reviewed by visiting committees. Analysis of visiting committee reports shows, first, that the committees generally are very pleased with the quality of self-assessment at the universities. In most cases, however, these self-assessments seem to be one-time operations that cease after the site visit has taken place. Secondly, the reviews show that internal quality management has not been developed systematically in all faculties. In 1998 an (international) audit committee which performed a meta-evaluation of the system of quality assessment of the Flemish universities concluded that more co-operation between universities is essential for the functioning of the framework for quality control (Auditcommissie Kwaliteitszorg, 1998).

Output

The labour market positions of graduates of universities and colleges is very good in Flanders. A study conducted by the department of education (Ministerie van de Vlaamse Gemeenschap, 1998) shows that in the age group 20 to 24 years old, 95% of graduates with college degrees (Gegradueerd or Licentiaat) and 95% of graduates with a university degrees (Licentiaat) have found a job. In the age group 25 to 29 years old, even more than 95% of all graduates have regular or casual jobs.

Table 9.2 contains the average gross annual salary per educational level for Belgium, Brussels, Flanders and Wallonia in 1995 (www.belgium.fgov.be). The table reflects the strong labor market position of graduates of universities
and colleges. Holding a higher education degree pays off, certainly in the case of a university or a two-cycle college diploma.

### Table 9.2: Average gross annual salary per educational level (in EURO; 1995)

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Belgium</th>
<th>Brussels</th>
<th>Flanders</th>
<th>Wallonia</th>
</tr>
</thead>
<tbody>
<tr>
<td>None or primary education</td>
<td>21,060</td>
<td>21,456</td>
<td>20,976</td>
<td>21,096</td>
</tr>
<tr>
<td>Lower secondary education</td>
<td>21,024</td>
<td>23,352</td>
<td>20,568</td>
<td>21,252</td>
</tr>
<tr>
<td>Higher secondary education (general)</td>
<td>23,088</td>
<td>26,304</td>
<td>22,824</td>
<td>23,532</td>
</tr>
<tr>
<td>Higher secondary education (vocational/technical)</td>
<td>22,596</td>
<td>24,768</td>
<td>22,824</td>
<td>22,596</td>
</tr>
<tr>
<td>Non-university higher education (one-cycle, max. 3 yrs.)</td>
<td>28,116</td>
<td>29,100</td>
<td>27,564</td>
<td>28,656</td>
</tr>
<tr>
<td>University education or two-cycle college education (at least 4 yrs.)</td>
<td>39,696</td>
<td>41,856</td>
<td>38,292</td>
<td>39,264</td>
</tr>
</tbody>
</table>

### Developments

#### 1994 reform

Since 1968 non-university higher education is no longer tightly linked to technical secondary education, but is part of the higher education sector. Non-university higher education used to be organised in two different forms: schools with short courses (three years) and schools with long courses (two cycles of at least two years). As mentioned earlier, after the reform of 1994 the short and the long courses are mostly offered in one institution under the name of one-cycle and two-cycle higher education. The more than 160 colleges which existed previously have merged into 29 institutions.

#### 1989 constitutional reform

The constitutional reform of 1989 transformed Belgium into a federation. Since that time, the responsibility for Flemish education has been vested in the hands of the Flemish government. Traditionally, education in Flanders is organised in different networks (netten). Before the constitutional reform, the actual way universities and colleges were treated, differed greatly for free (private) and state universities and colleges.

Before the 1990s, state education was the direct responsibility of the (national) Minister of Education, who was the organising body of state education. Higher education institutions were therefore directly influenced by current features of the political system: higher education institutions were unstable due to linguistic troubles and were financially restricted because of the increasing public debt. Moreover, the strong centralism (everything was decided ‘in Brussels’) caused a strong bureaucratisation (Van Heffen et al., 1999).

The free universities were relatively autonomous. According to Verhoeven (1982, p. 131) this can be explained by, on the one hand, the fact that university education has always been seen as necessarily autonomous and organised by private initiative, on the other hand because it was entirely clear that interventions could trigger off irreconcilable conflicts. The government was reluctant to regulate, and preferred to leave the delicate ideological and linguistic equi-
librium in the university sector in peace. Free colleges also had more auton-
omy than state colleges, but they did not possess the same freedom to
manoeuvre as their counterparts in the university sector because the regu-
lation on college education was more rigorous.

With the Decree on universities of 1991 and the Decree on colleges of 1994,
the Flemish government took an important step towards far-reaching autono-
my. The Flemish governmental agreement of 17 June 1995 speaks of a radical
enlargement of the autonomy and the responsibility for the whole education
sector. The decrees only impose formal requirements (length of the course,
division in cycles, possibilities to abridge the course duration and so on); the
content of education (the course programme) can be decided by the institu-
tions themselves.

Nowadays, three educational networks are distinguished:
- Community education: this is the education organised by the organising
  body Het Gemeenschapsonderwijs (Community Education) on behalf of the
  Flemish Community. The Constitution forces Community Education to be
  neutral; this means that the religious, philosophical or ideological convic-
tion of parents and pupils must be respected. Examples are the University
  of Gent and the College of Gent.
- Subsidised official education: includes provincial education organised by
  provincial authorities and municipal education set up by municipal
  authorities; a school of this network can be denominational or not.
  Examples are the Plantijn-College of the province of Antwerp (only one-
cycle programmes) and the Provincial College of Limburg at Hasselt (one-
and two-cycle programmes).
- Subsidised private education: this is education provided by private initia-
tive, a private person or a private organisation. It includes denominational
  (mainly Catholic), non-denominational private education and indepen-
dent schools that apply specific instructional methods. Examples are
  Catholic University of Leuven and the Economic College Sint-Aloysius at
  Brussels (only two-cycle courses) (www.ond.vlaanderen.be).

The networks are free to develop their own curricula and schedules, provided
they are approved by the Flemish Minister of Education, and are free to choose
their instructional methods.

Recent developments

Rationalisation
Generally, the Flemish government strives for more transparency and raciona-
licity of the programme supply in the higher education system. The previous
administration (Christian-democrats and social-democrats) appointed special
government commissioners who had to develop plans for the optimisation of
university and colleges education. These commissioners (Dillemans and
Martens) had to finish their plans in agreement with the higher education sec-
tor within five years (Van Den Bossche, 1995-1996, 1998). The present
government (liberals, moderate Flemish nationalists, social democrats and
environmentalists) goes about it in a different way and tries to influence the
sector more directly (for instance new mergers of colleges and a new funding
According to the Flemish Education Council (VLOR), the new government is not fully aware of the necessity of co-operation between the authorities and the field of education (www.klasse.be). Recently, a comment of the Flemish Prime Minister with regard to a possible dissolution of the networks (netten) caused much commotion. It looks as if the government has the intention to replace the segmented, neo-corporatist higher education system by a more uniform framework.

**Bologna declaration**

The Bologna declaration, which was also signed by the government of Flanders, is no subject of fierce public and political debate. It is expected that before 2010, the degrees of kandidaat and licentiaat will be replaced by the degrees of Bachelor and Master respectively. Consequently this will blur the borders between two-cycle non-university higher education and university education even more. But how ‘Bologna’ will affect the one-cycle programmes is not yet clear.