

## **Bachelor's Program**

## 1st year

|       | 1st PE                                     | RIOD                  | 2 <sup>nd</sup> PI           | ERIO | )                 | 3                              | rd PE  | RIOD        | )    |      |     |                     |      | 4 <sup>th</sup> I | PΕ  | RIO  | D    |       |       |    |            |     |
|-------|--------------------------------------------|-----------------------|------------------------------|------|-------------------|--------------------------------|--------|-------------|------|------|-----|---------------------|------|-------------------|-----|------|------|-------|-------|----|------------|-----|
|       | Octal 1                                    | Octal 1b              | Octal 2a                     | C    | ctal 2a           | Octal 3                        | а      | O           | ctal | 3b   |     | Oct                 | al 4 | 4a                |     | (    | Ос   | tal 4 | 4b    |    |            |     |
| Month | September                                  | October               | November Decer               | mber | January           | February                       |        | arch        |      | Ap   | ril |                     |      | Ма                | y   |      |      | Jur   | ne    |    |            | ıly |
| Week  | 1 2 3 4 5                                  | 6 7 8 9               | 10 1 2 3 4 5                 | 6    | 7 8 9 10          | 1 2 3                          | 4 5    | 6 7         | 8    | 9 10 | 1   | 2                   | 3    | 4                 | 5   | 6    | 7    | 8     | 9     | 10 | 1 :        | 2   |
|       | Introduction<br>to Studying<br>Nanobiology | Chemistry 1<br>NB1102 | Chemistry 2<br>NB1110        |      | chemistry<br>1012 | Molecular<br>NB1016<br>3 EC    | r Biol | ogy         |      |      | Ν   | omo<br>B112<br>EC   |      | ula               | r P | rogi | ran  | nmii  | ng    |    |            |     |
|       | NB1031<br>3 EC                             | 3 EC                  | 3 EC                         | 3 E  | С                 | Physics 1<br>NB1143            | b      | Biop<br>NB1 |      | cs   | N   | nysic<br>B107<br>EC |      | Biol              | og  | y of | f th | e C   | ell ' | 1  | ay         |     |
|       | Genetics<br>NB1022<br>4 EC                 |                       | Physics 1a<br>NB1140<br>4 EC |      |                   | 3 EC                           |        | 3 EC        | ;    |      | N   | ourna<br>B105<br>EC |      | Club              | 1   |      |      |       |       |    | er Holiday |     |
|       | 4 50                                       |                       | 4 EC                         |      |                   | Analysis 3                     | 3      |             |      |      | Li  | near                | ΑI   | geb               | га  |      |      |       |       |    | Ĕ          |     |
|       | Analysis 1<br>NB1201                       |                       | Analysis 2<br>NB1206         |      |                   | NB1211<br>3 EC                 |        |             |      |      |     | B123<br>EC          | 0    |                   |     |      |      |       |       |    | Summer     |     |
|       | 5 EC                                       |                       | 5 EC                         |      |                   | Labcourse<br>A1 NB1150<br>3 EC |        |             |      |      | Α   | abco<br>2 NB<br>EC  |      |                   |     |      |      |       |       |    |            |     |

## 2<sup>nd</sup> year

|       | <b>1</b> st                      | PΕ  | RIO  | D      |     |    |                      | 2     | nd   | PER   | 100   | )    |     |      |            |                            | 3 <sup>rt</sup> | PE | RIC  | OD          |      |      |      |     |             |      | 4 <sup>th</sup> F | EF  | RIO | D   |       |     |    |       |        |
|-------|----------------------------------|-----|------|--------|-----|----|----------------------|-------|------|-------|-------|------|-----|------|------------|----------------------------|-----------------|----|------|-------------|------|------|------|-----|-------------|------|-------------------|-----|-----|-----|-------|-----|----|-------|--------|
|       | Octal 1                          |     | (    | Octal  | 1b  |    | Oc                   | tal 2 | а    |       | 0     | ctal | 12  | а    | C          | otal)                      | За              | ı  |      | Ос          | tal  | 3b   |      |     | Oct         | al - | 4a                |     | (   | Oct | tal 4 | 1b  |    |       |        |
| Month | September                        |     | Oct  | ober   |     | No | vembe                | r [   | Dec  | cembe | er    | Jai  | nua | ary  | Feb        | ruary                      | Т               | Ma | arch |             |      |      | ٩pri | I   |             |      | May               | ,   |     |     | Jun   | ie  |    | Jul   | у      |
| Week  | 1 2 3 4                          | 5   | 6    | 7 8    | 9   | 10 | 1 2                  | 3 4   | 4    | 5 6   |       | 7    | 8   | 9 10 | 1          | 2 3                        | 3 4             | 5  | 6    | 7           | 8    | 9    | 10   | 1   | 2           | 3    | 4 5               | 5   | 6   | 7   | 8     | 9   | 10 | 1 2   | 3      |
|       | Biomolecula<br>Function - N      |     |      | ture a | and |    | Philo                |       | ıy a | and E | Ethic | cs   |     |      | Cor<br>NB2 | nput<br>2181               |                 |    |      | cien        | се   |      |      |     |             |      |                   |     |     |     |       |     |    |       |        |
|       | 3 EC                             |     |      |        |     | _  | 3 EC                 |       |      |       |       |      |     |      | Stat       | istic                      | s               |    | 0    | ptic        | sa   | nd   |      | Jo  |             | al C | llub :            |     | NB  | 21  | 51 -  | 1 E | C  |       |        |
|       | Thermodyn<br>Transport -<br>3 EC |     |      |        |     |    | Phys<br>NB20<br>3 EC |       | 3io  | logy  | of t  | he ( | Се  | II 2 | NB2        |                            |                 |    | М    | icro<br>B20 | osc  | opy  |      |     | oinf<br>B21 |      | natio             | cs  |     |     |       |     |    | ay    |        |
|       | Physics 2<br>NB2141<br>3 EC      |     |      |        |     |    | Signa<br>TN25        |       | nd   | Syst  | tem   | ıs   |     |      | 3 E        |                            |                 |    |      | EC          | _    | _    | _    | -   | 5 E0        | _    | nalys             | sis |     |     |       |     |    | Holid | Resits |
|       | Differential NB2191              | Equ | atio | ns     |     |    | 6 EC                 |       |      |       |       |      |     |      | Dev        | lutic<br>/elop<br>2032     | m               |    |      |             | gy   |      |      | 3   | 3212<br>EC  |      |                   |     |     |     |       |     |    | ummer | Ľ      |
|       | 3 EC                             |     |      |        |     |    |                      |       |      |       |       |      |     |      | IND.       | 2032                       |                 |    |      |             |      |      |      |     |             |      | l Ph              | ysi | cs  |     |       |     |    | S     |        |
|       | Electronic I                     | nst |      | entat  | ion |    |                      |       |      |       |       |      |     |      | 6 E        | С                          |                 |    |      |             |      |      |      | 3 E |             |      |                   |     |     |     |       |     |    |       |        |
|       | NB2214<br>6 EC                   |     |      |        |     |    |                      |       |      |       | _     |      |     |      |            | osco <sub>l</sub><br>046 - |                 |    |      | ру Е        | Pact | icur | n    |     |             |      | hno<br>- 2        |     |     |     |       |     |    |       |        |

| Legend             |                   |         |
|--------------------|-------------------|---------|
| Integrated Courses | Biology/Chemistry | Physics |

EC: European Credit







YEAR 2

## **Academic skills in Nanobiology courses**

Part of the Nanobiology programme is to learn academic skills. Most courses include opportunities to learn at least one of these skills. The courses listed below offer these skills in at least two areas:



Presenting

| YEAR 1                               |                    |   |   |   |
|--------------------------------------|--------------------|---|---|---|
| Introduction to Studying Nanobiology | NB1031             |   |   |   |
| Journal Club 1                       | NB1052             |   |   |   |
| Labcourses                           | NB1151 /<br>NB1164 | • | • |   |
| Biophysics                           | NB1132             |   |   | • |



Programming

| Philosophy and Ethics                  | NB2022 |   |   |  |
|----------------------------------------|--------|---|---|--|
| Evolutionary and Developmental Biology | NB2032 |   |   |  |
| Microscopy / Nanoscopy Practice        | NB2046 |   | • |  |
| Physical Biology of the Cell 2         | NB2071 |   |   |  |
| Nanotechnology                         | NB2081 |   | • |  |
| Image Analysis                         | NB2121 |   |   |  |
| Journal Club 2                         | NB2151 | • | • |  |
| Bioinformatics                         | NB2161 |   |   |  |
| Computational Science                  | NB2181 |   |   |  |
| Electronic Instrumentation             | NB2214 |   |   |  |
| Statistical Physics                    | NB2220 |   |   |  |



Group work



Practical



Writing

| YEAR 3                          |        |  |   |   |
|---------------------------------|--------|--|---|---|
| Bachelor End Project            | NB3000 |  |   |   |
| Nanomedicine                    | NB3011 |  | • |   |
| Computational Neuroscience      | NB3014 |  |   | • |
| A Primer in Neuroscience        | NB3015 |  |   |   |
| High-Speed Scientific Computing | NB3016 |  |   |   |
| Epigenetics                     | NB3022 |  |   |   |







## 3rd year

|       |   |      |     | 1°   | t P | ER  | lo  | D   |     |    |   |             |     |     | 2    | nd  | PE  | RIC  | D   |     |     |      |          |     | :    | 3 <sup>rd</sup> | PEF | RIO      | D   |           |     |                   |     |           |      | 4 <sup>t</sup> | ħР  | EF | RIO      | D   |      |      |    |                 |     |        |
|-------|---|------|-----|------|-----|-----|-----|-----|-----|----|---|-------------|-----|-----|------|-----|-----|------|-----|-----|-----|------|----------|-----|------|-----------------|-----|----------|-----|-----------|-----|-------------------|-----|-----------|------|----------------|-----|----|----------|-----|------|------|----|-----------------|-----|--------|
|       |   | C    | )ct | al 1 |     | Т   | - ( | Oc  | tal | 1b |   | Т           | (   | Oct | al 2 | a.  |     |      | Oct | tal | 12a | 3    | (        | Oct | al 3 | За              |     | (        | Ос  | tal 3     | 3b  |                   | Г   | 0         | cta  | l 4a           | 1   | Т  | (        | Oct | al 4 | 1b   |    |                 |     |        |
| Month | 5 | Sept | em  | ber  |     |     | Oct | tob | er  |    |   | Nον         | /em | ber |      | Dec | cen | nber |     | Ja  | nua | ary  | Fel      | rua | ry   |                 | Mar | ch       |     |           | -   | Apri              | l I |           |      | Ν              | Лау |    |          |     | Jun  | e    |    | Jı              | uly |        |
| Week  | 1 | 2    | 3   | 4    | 5   | 5 ( | 6   | 7   | 8   | 9  | 1 | 0 1         | ١.  | 2 : | 3    | 4   | 5   | 6    |     | 7   | 8   | 9 10 | 1        | 2   | 3    | 4               | 5   | 6        | 7   | 8         | 9   | 10                | 1   | 2         | 3    | 4              | 5   | ,  | 6        | 7   | 8    | 9    | 10 | 1               | 2   | 3      |
|       |   |      |     |      |     |     |     |     |     |    |   | lind<br>D E |     |     |      |     |     |      |     |     |     |      |          |     |      |                 |     |          | В   | ach       |     | or I<br>NB:<br>20 | 300 |           | roje | ect            |     |    |          |     |      |      |    | Summber Holiday |     | Resits |
|       |   |      |     |      |     |     |     |     |     |    |   |             |     |     |      |     |     |      |     |     |     |      | NE<br>Co |     |      | tive            | :   | NE<br>Cc |     | lec<br>se | iv€ |                   |     | IB<br>Cou |      |                | ve  |    | NE<br>Co |     |      | tive | ÷  | Sum             |     |        |
|       |   |      |     |      |     |     |     |     |     |    |   |             |     |     |      |     |     |      |     |     |     |      | 2.       | 5 E | 0    |                 |     | 2.5      | 5 E | С         |     |                   | 2   | .5        | EC   | :              |     |    | 2.5      | Ε   | С    |      |    |                 |     |        |

## **Elective courses**

Find more information on these electives via the studyguide, using the course codes.

| NB3014  | Computational Neuroscience                       |
|---------|--------------------------------------------------|
| NB3015  | A Primer in Neuroscience                         |
| NB3016  | High-Speed Scientific Computing                  |
| NB3017  | Quantum Mechanics for Nanobiology 1              |
| NB3018  | Quantum Mechanics for Nanobiology 2              |
| NB3019  | Molecular Motors                                 |
| NB3020  | Genomics Technology in Breast Cancer<br>Research |
| NB3021  | Optics and its Applications in<br>Nanobiology    |
| NB3022  | Epigenetics                                      |
| NB3023  | Human Complex Genetics                           |
| NB3024  | Advanced Math Topics                             |
| TBM301A | Writing a Bachelor's Thesis in English           |

## **Minors**

#### **General information**

For more information on minors, including the free minor option and an overview of thematic minors:

Brightspace > catalog > search for 'Nanobiology bachelor'

# Minor Collaborative Science for Biomedical Breakthroughs.

A selection minor offered to all Bachelor students.

minor-csbb@tudelft.nl

#### Minor abroad

#### International Office Applied Sciences

Information and registration form on:

⊕ buitenland.tudelft.nl

☑ InternationalOffice-TNW@tudelft.nl

# **Honours Programme Bachelor Nanobiology**

Students with excellent study progress, will be invited to join the Nanobiology Honours Programme. It includes an additional interdisciplinary coursework, seminars and a research project. Eligible students will be invited for the programme at the end of year 1.

## **Bachelor End Project (BEP)**

Information and registration form on:

⊕ Brightspace > catalog > search for 'Thesis Office'

☐ ThesisOffice-TNW@tudelft.nl

## **Bachelor Nanobiology**

## **General information**

#### **Brightspace**

Brightspace is TU Delft's digital learning and communication environment for students & staff.

#### Study guide

For programme details, courses and course details.

#### **Timetables**

#### **TUD and Erasmus MC**

#### Register for exams

Exams require advanced registration!

There are strict deadlines.

Written exams:

my.tudelft.nl

All other assessments:

see Brightspace course for instructions

#### **Binding study recommendation**

⊕ bsa.tudelft.nl

#### **Education and Student Administration**

www.tudelft.nl/en/student/administration

#### Regulations degree programmes

The rules and regulations concerning education programmes and examinations. Each programme has individualized regulations.

#### **Faculty student portal**

#### **TUD and Erasmus MC**

#### Servicedesk

The place for questions or complaints concerning the building, facilities, ICT, coffee machines, certified transcripts and issues regarding theft.

#### **TUD and Erasmus MC**

#### E-service

For questions regarding (reactivation of) NetID.

⊕ e-service.tudelft.nl

#### Study association

#### S.V.N.B.Hooke

⊕ hooke.tudelft.nl

## **Programme team**

#### **Programme Director**

#### **Joris Pothof**

Has final responsibility for the BSc programme.

☑ J.pothof@erasmusmc.nl

#### **Programme coordinators**

#### Johanna Colgrove & Diane Mevius

Consult them if you have questions about the organisation and logistics of the programme or if you have ideas for improvements.

info-bsc-nb@tudelft.nl

#### Selection coordinator

#### Diane Mevius

Consult her if you have questions about the selection procedure.

⊕ tudelft.nl/bsc/nb/nc

#### **Academic counsellor**

#### Tanja Hilkhuijsen

Consult her on all kinds of study-related matters, including personal problems.

#### **Programme assistant**

#### Anne Huijsman

Contact person for questions regarding logistics of studying at Erasmus MC

opleiding.nanobiologie@erasmusmc.nl

#### **Board of Examiners**

Responsible for the quality of the programme, ensuring that the rules are followed and adjudicating exceptions.

EC-NB@tudelft.nl

⊕ regulations.tudelft.nl

#### **Board of Studies**

Responsible for advising the programme on content.

#### **Career & Counselling Services**

Student counsellors and coaches. Workshops and trainings for students and career support.

 www.tudelft.nl/en/student/counselling/careercounselling-services

#### **Good start**

A quick way to get to know everything you need for a good start.

www.tudelft.nl/goodstart