Research and the EBL

March 2018

Erasmus Behavioural Lab

Usage and Guidelines

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General information and guidelines

The Erasmus Behavioural Lab offers research facilities, financed by ESSB-DPECS-Psychology, ERIM and the CvB.

This document gives an overview of the possibilities and expected behaviour within the EBL. Each section presents an overview from a different perspective or organisational role, some information will thus be repeated.

The EBL provides researchers with a number of pre-configured setups to conduct psychological and behavioural research. In the section "Facilities" you can find an overview of the possibilities offered at the moment.
The EBL is available to the researchers and students of ESSB-DPECS (Psychology) and researchers affiliated with ERIM, and to their assistants/PhD's etc.
In a shared facility, it is necessary to regulate a number of things to ensure optimal usage and availability of the EBL. In the section "Usage by Role", a number of usage-scenario's and some practical guidelines are presented.

In general, the EBL staff offers advice and service in preparing and conducting research in a range of area's. The number of employees however is limited, so building a complete experiment, an on-line questionnaire etc. can only be done by the researchers, AiO's/PhD's, volunteers or students themselves. The EBL staff advises or gives limited support on the aspects of the experiment that integrate with standard equipment.

The EBL employs staff that primarily has the task of maintaining and supporting all facilities. Besides that, regular user support within the EBL is available on the subject of usage of the computers, the software and specific EBL equipment. Several practical matters can be dealt with directly by the staff of the EBL, like assigning keys, borrowing equipment, etc.

In general, we encourage anyone that wants to use the EBL (especially a first time), to make an appointment upfront, even before beginning the design of an experiment. The EBL staff has a lot of experience in designing, setting up, supporting research and analysing data, so please use that knowledge and experience.
Depending on your needs, the meeting can be briefly or more extensive. The other purpose of the meeting is to provide the EBL staff with a good insight in what's happening and required in the lab.

You can always find the latest version of this "EBL starting point" at: http://ebl.eur.nl, click on "Lab guide for researchers and students". Specific manuals on hardware and software can also be found in the EBL Assistant, which is available on all EBL computers.

Eating, drinking, having lunch is NOT allowed in the lab-rooms or control rooms. You can only use a bottle or cup of water within the EBL area. Plan time to have breaks during your research.
You are also responsible for the instruction, guidance and behaviour of your participants in the EBL. Tell them upfront that eating, drinking, using cellphones or talking loud is NOT allowed in the lab-area, including the waiting room.

Facilities

General

A number of facilities can be used in (combination with) any study, in any room within the lab. Think about using a microphone, loudspeakers or headphones, but also the use of equipment for recording physiological measures like heart rate or skin conductance (arousal). There is also the possibility to use E-prime button boxes to measure response times very accurately.

Furthermore, especially in the Support rooms, some facilities are available to prepare stimuli-material. Think of equipment to digitize analog audio, video and other material, as well as edit it. A more detailed list of available equipment and software can be found in annex A. If your requirements are not covered by the list, consult the EBL staff. Subject computers have a more restrictive set of available software than Support Room computers.

> If you want to use the pantry just outside the lab at Mandeville T12, clean-up immediately. The pantry is part of RSM and DPECS-Psychology offices, but if used properly, users of the EBL may continue to use it.
> **Note that in the EBL area, only water may be consumed.**

Lab rooms

waiting room
On signs/directions on the campus that mention the EBL, near to the EBL also the waiting room is mentioned. In the waiting room, 14 persons can take a seat and wait for their appointment. A remotely viewable camera is mounted in the waiting room, the image can be viewed on any computer in the lab in real time, but is never recorded.

Use the fact that the lab and the waiting rooms are mentioned on signs in the Mandeville building. Use these names in your communications with participants and avoid mentioning specific rooms. If participants all go directly (and only) to the EBL waiting room, they are not searching throughout the lab for the specific room, possible causing disturbance in some way. This construction may require you to walk some more, but will support the quality of research in general. You have the camera to monitor the waiting room.
(See: EBL route template)

4-persons labs (6 labs)
Each room has 4 computers available. The tables in these labs are separated by room dividers. In one of the labs (room 6, special CRT monitors are available for the presentation of very short stimuli, up to 200Hz at a resolution of 800x600 pixels and 32-bits colours (4 billion).
The other 4-persons rooms have 24.1" TFT-IPS widescreen displays that display up to 1920x1200 pixels in a 16:10 ratio.

2-persons labs (4 labs)
Each room has 2 computers available. The tables are separated by a room divider. These rooms can be used for 2 participants, or in a situation where the researcher works with one subject together in a lab. Also, after consulting the EBL staff, the set-up of the room can be changed for special studies. All 4 rooms have 24.1" TFT-IPS widescreen displays that display up to 1920x1200 pixels in a 16:10 ratio, on both computers.

2-person labs are particularly suitable to conduct studies that require physiological measures, Biopac equipment for example can be connected to a hardware trigger port.

cubicles

Divided into 4 sections, this lab has 12 medium-sized and 16 full-sized cubicles available. In the separate supervisor room, 4 supervisor workstations are available to control all computers in the cubicles.

With several "Assistants" (computer programs) cubicle-computers can be switched on or off, but also an experiment or other data can be copied to —or controlled on— any number of cubicle-computers. Additionally, gathered research data can be easily collected (retrieved) after conducting a study, also with the help of the "Cubicle Assistant".

All cubicle-sections have 24.1" TFT-IPS screens with a resolution of 1920 x 1200 and a ratio of 16:10. Optionally, the cubicles can be equipped with response boxes, microphones and/or USB camera's. Headphones are standard equipment in all labs.

eeg-labs (2 labs, 1 mobile set)

EEG labs with amplifiers and caps for 32 or 64 channels. Additionally, skin conductance, heart rate and respiration can be measured. Also an option for 32 extra channels is available, to measure for example muscle contractions (EMG) in several spots. Stimuli can be presented up to 200Hz, 800x600 pixels and 32-bit colours at a 22" (50 cm diagonal) 4:3 CRT screen.

Analysis can be done with Brainproducts Vision Analyzer, of which several licenses are available in all Support Rooms of the EBL.

In EEG lab 2, optionally a Digitimer DS7A electric stimulator is available.

Usage of these specific rooms with their complex equipment will have to be guided closely by research staff supervisors and EBL support staff. See 'Guidelines for booking' for more details on using and booking the EEG labs and equipment.

video-labs (2 labs)

Rooms with equipment for digital audio- and video-recording, which can be uploaded to a video-conversion service or written to a DVD. In each observation rooms, up to 6 people can be seated, depending on the layout. The supervisor room is shared by both labs.

The camera's in the observation rooms can be panned, tilted and zoomed from within the control room, where 2 sets of controllers are available.

eye tracking labs (3 labs)

In 2 adjecent rooms, 2 SMI eye trackers are available. The mobile RED-m has a 120Hz sampling frequency, the stationary RED250 system has a 250Hz sampling frequency. Separated by a room divider there is a seat for the experiment supervisor who, depending on the type of study, needs to use one or two workstations to control the eye tracker and present stimuli.

The EBL staff offers very limited support with the integration of eye tracking communication in an experiment that is built in E-prime.

Besides the SMI eye trackers, the third eye tracker room has an Eyelink 2K eye tracker available, which can sample at 1000Hz binocular or even 2000Hz monocular. Stimuli can be presented up to 200Hz, 800x600 pixels and 32-bit colours at a 22" (50 cm diagonal) 4:3 CRT screen.

Stimuli can be presented with E-prime. When however, specific interaction is needed between the eye tracker and the stimuli-program, it needs to be built in C, Perl or

Python or the SR-Research Experiment Builder. The knowledge and experience needed for that is very limited within the EBL support staff.

Eye tracking in general needs a complex setup and often requires custom and complex programming and verification. The same applies to analysis, which is very demanding on users and software. The EBL staff can advise on the strategy and architecture of such an experiment, but does not have the resources available to develop or support such experiments. If this type of setup is needed, make an appointment with the manager of the EBL to discuss this.

12-persons labs (2 labs)
These rooms have room for 12 people. There are 4 tables and 12 chairs, but no additional technical infrastructure. A computer can be placed on demand.

Paid participants

The EBL manages the EURO subject pool. This pool holds prospective participants, that are willing to participate in a study in return for a fee.
This system works in similar fashion to ERAS (DPECS-Psychology) and is of the same make as the course credit system of RSM (ERPS).
After posting a new study, participants can subscribe to it and optionally choose a time slot. At the moment the system does not offer mass mailings to prospects.
More details can be found in the section "Administration".

On-line research

Several possibilities exist to conduct on-line research. Some tools are more suited to conduct on-line questionnaires, others are more suited to full-blown on-line experiments and can even contain reaction time measurements.

On-line questionnaires can be easily built and managed by software from Qualtrics, for which the University Library manages a site-license.
Every student and staff-member with valid ERNA credentials can access and use Qualtrics at: https://eur.nl/qualtrics

When it is necessary to measure reaction times on-line, we have the possibility to use Inquisit from Millisecond.com. With this software, one can build a experiment-script that can be executed on a Windows or Macintosh computer, or (in unaltered form) by several supported browsers on these platforms.
The design of an Inquisit script needs a lot of attention and requires programming/ scripting skills at a intermediate level. The EBL has limited expertise to support this, but is resource-wise not always able to construct complete experiments with Inquisit.
A web-license for Inquisit will need to be provided for by the researcher.

Experiments, research-data and backups

The responsibility of safe-guarding experiment files, executables, stimuli and gathered research-data is primary at the researchers own shoulders. The EBL does **not make backups** of data, but merely leaves them on the computers for the duration of the academic year. Backups are also **not** made of data at support-room computers.

During the summer period, all computers will be re-installed and all data thus will be erased from the internal harddisk(s).
A few weeks before the maintenance-period during the summer starts, each user of the EBL booking system will receive a reminder to safe-guard any data on EBL-computers.

Furthermore, for safety and stability reasons, it is prohibited to use portable data-devices in the EBL lab-rooms. This is only allowed in one of the before-mentioned Support Rooms.

So, it is of vital importance that after each day or session, you, or your assistant(s) use the "EBL Assistant" utility to upload the gathered data to our servers, after which you can retrieve the data at one of the workstations in one of the Support Rooms. You can then place it on your network drive, where it will be backed-up by your IT department, probably the following night. Alternatively, at night data will be automatically synchronized to our servers, ready for you to retrieve the next day.
It is allowed to connect a portable hard-disk or USB-stick to one of the Support Room computers. It is strongly recommended to <u>always use encrypted portable media</u>.

Further information about the EBL Assistant can be found in it's help file.

Software availability

Stimuli-software

At the moment the software primarily used to run experiments in the EBL lab rooms is E-prime. In all of the lab-rooms, a run-time version of E-prime (E-run) is available, in the Support Rooms the full version (E-studio) is available to amend or develop your experiments in E-prime.
On request, Neurobs Presentation or Millisecond Inquisit Desktop Client is available for use in an arbitrary lab. Costs may be involved in this.
Furthermore, several open source Python-based experiment building-and-running environments are available in the EBL.

Analysis-software

Much of the software available in the EBL lab-rooms is also available in the Support Rooms of the EBL. To support the main purpose of the Support Rooms, development and analysis in research, also many other packages are available there.

An extensive list of all available software in both lab- and support rooms can be found in [Annex A](#)

Sometimes the software has to be installed on demand. In that case, contact the EBL staff. (See section "[Contact information](#)")

Usage by role

General

Students are **not** allowed to work solo outside office hours. Someone from the staff needs to be in the vicinity and available when students want to use the EBL during evening hours or on Saturday. These arrangements need to be made upfront when applicable. This rule is instated for the safety of both the student and the participants.

In your communication with participants, use the fact that directions to the EBL also include directions to the EBL waiting room. (See: EBL route template)
In the waiting room a camera is mounted. The image can be viewed on any computer in the lab. Experiment supervisors can easily monitor the arrival of participants in this way.

If your study contains some kind of "punch line" or manipulation that current participants should not disclose to newly arriving participants, you can have your participant use the exit-only door in the closed elevator section of the lab.

Researchers DPECS-Psychology

As stated at the start of this document, before starting a study (especially one that involves the more "technical" aspects of the EBL) consult the EBL staff, which has a lot of practical knowledge concerning the research process in general. This can be just a short checkup of the process involved and does not have to take a lot of time.

If one of your assistants or students is starting a study in the EBL, you are required to make an appointment together with them with the manager of the EBL, to discuss and co-ordinate what is needed from the EBL. The assistant or student is not allowed to arrange this first appointment themselves.

Furthermore, some practical things:
- Keys to all lab rooms are managed by the key cabinet close to the entrance of the EBL. A pin code is needed to access the keys, see the section on keys to find out all details on this. The PIN may not be shared among users!
- To book the EBL, request activation of your login at the administrator.
- ERAS is the place to make use of the obligatory subject hours that DPECS-Psychology student have to fulfill during their bachelor period. ERAS is part of Psyweb.

(See section "Contact information")

Researcher RSM/ESE

In case of any special wishes or demands in connection to the study you will be conducting, request a meeting with manager of the EBL.
Request a login for the booking system at the EBL staff.
This will automatically generate a PIN for the key cabinet, which will give you access to any regular lab room.
In case of questions, contact the EBL staff. (See section "Contact information")

Information regarding the ERIM Internal Review Board can be found at the ERIM website:
https://www.erim.eur.nl/research-facilities/internal-review-boards
It is required to fill out the correct IRB code in every lab-reservation you make.
Follow the instructions (in red) in the EBL booking system.

PhD DPECS-Psychology

Studies are placed in ERAS by the user her/himself, they also take the role of experiment-supervisor and add themselves as such to the study.
Request a login for the booking system at the EBL staff.
This will automatically generate a PIN for the key cabinet, which will give you access to any regular lab room.
In case of questions, contact the EBL staff. (See section "Contact information")

PhD candidate RSM/ESE

In case of first use of the EBL, or any special demands related to the study you will be conducting, request a meeting —through your supervising researcher— with the manager of the EBL. The first meeting will always have to be attended by your supervisor.
Request a login for the booking system at the EBL staff.
This will automatically generate a PIN for the key cabinet, which will give you access to any regular lab room.
In case of questions, contact the EBL staff. (See section "Contact information")

Information regarding the ERIM Internal Review Board can be found at the ERIM website:
https://www.erim.eur.nl/research-facilities/internal-review-boards
It is required to fill out the correct IRB code in every lab-reservation you make.
Follow the instructions (in red) in the EBL booking system.

Students DPECS-Psychology

In case of first use of the EBL, or any special demands related to the study you will be conducting, request a meeting through you supervising researcher, with the manager of the EBL. The first meeting will also have to be attended by your supervisor.

Request a log-in for the booking system within Psyweb (See section "Contact information"). This will automatically generate a PIN for the key cabinet, but **not immediately** gives you any access to lab rooms. Specify which lab room(s) you will need and have your supervisor send a request to the EBL staff to assign the correct keys to your account.

In case of questions, contact the EBL staff. (See section "Contact information")

Getting participants:
Studies can be published within ERAS by the supervising researcher from the staff.
The student normally has the role of experiment-supervisor and can be added as such to the definition of the study.

Administration

Booking system

The EBL booking system is the place to reserve space and time in the lab. It is an on-line booking system which requires an ERNA-style login and password. Before you can login to the booking system, your account needs to be activated. See "Usage by Role" on how to achieve this.
The EBL booking system (https://booking.ebl.eur.nl) is reachable from campus computers, or using a VPN or Remote Desktop connection off-campus.

If, for some reason, you need to contact other users of the booking system, for example to discuss a booking made by another researcher, look at the ERNA account and search for their email-address under "User list". (upper right side)

Keys

The EBL utilizes a key cabinet to issue keys to all users.
This key cabinet is located near the entrance of the EBL and holds individual keys to all lab rooms.

Access to the key cabinet and thereby all regular lab rooms is automatically given to staff members (of both ERIM and DPECS-Psychology) who request a login for the booking system.
Students automatically receive a PIN when applying for an account for the booking system, but have to request access to specific labs through their supervisor.

Once you have acquired a key for usage, using your personal PIN, you will be held responsible for this key until you return it to the cabinet. The lab room for which you took a key, can be used subsequently by another researcher, so it is important that you return a key immediately after the period you have booked in the lab has expired. It is forbidden to take a key with you when you leave the lab area, you have to return it then. So basically this means that keys do not leave Mandeville T12.

All accesses to the key cabinet will be logged and recorded.

In case of any questions, contact the EBL staff.
(See section "Contact information")

Participants

In the EBL, you all are going to work with participants.
Treat them fairly, also when they ask "stupid" questions or run late. You and other researchers depend on their good will.
On the other hand, do not hesitate to tell them clearly what the expected behaviour in the lab is.

Make sure you are briefing and de-briefing participants correctly, so they understand what the purpose of the study is (or was) and learn something from the experience.

To recruit participants, three on-line systems are available. Access and usage depend on your position at either DPECS-Psychology or ERIM.

ERAS

ERAS stands for "EBL Research Administration System" and it manages the obligatory subject participation hours of DPECS-Psychology students.
It is embedded in the learning environment of DPECS-Psychology, https://www.psyweb.nl.
(See section "Contact information")

ERPS

ERPS stands for ERIM Research Participation System and it is a course credit system supported by RSM and available to all RSM researchers. Studies are placed by the researcher and have to be approved by the administrator.
A login for this pool can be requested at the administrator. (See section "Contact information")

EURO

The EURO subject pool is available to any researcher that has the possibility to pay participants. It uses the same on-line system as ERPS, but logins are managed by the EBL. Every researcher places their own experiments and also approves them. No interaction from the administrator is needed to publish studies.

Every year, a mailing is done to attract new participants to the EURO subject pool.
A login for this pool can be requested at the administrator. (See section "Contact information")

Participants are paid compensations in the order of € 7,50 - € 10,- per hour.

Guidelines for booking

In general: If you find out, before or during your study, that you have booked too much time or space, you are obliged to free up the unused resources in the booking system immediately. Your colleague-researchers will be grateful for that.

It is not allowed to "speculatively" book space and then remove your claim just before, or after you have (not) used the lab.

Availability outside office hours: Members of the staff are allowed to use the EBL outside of office hours. Technical support, however, will not be available in the evening hours and on Saturday.

But, students are **only** allowed to work in the EBL outside office hours, when a staff member is in the vicinity and available in case of emergencies.

Arrangements between students and staff should be made upfront for these occasions.

Cubicle labs

The guidelines for booking the cubicles are the following.

There are 2 sections of 6-cubicles and 2 sections of 8-cubicles and 4 supervisor workstations to support this setup.

It is not allowed to book several sections at once. The maximum booking period is one week for one section at a time.

In case the study needs a larger claim, contact your co-ordinator for cubicle reservations. See section "Contact information".

EEG labs

Both EEG labs are heavily used, especially from March till June.

To oversee the fair use of EEG labs and mobile equipment, an EEG lab coordinator is instated. See section "Contact information".

Fair use policy EEG labs March till June.

- Regular working hours for the EEG labs are 9:00 to 19:00, utilising time slots of two hours. Reservations (EBL booking system) must be made according to these time-slots. Each reservation between 9:00 and 19:00 starts on an odd hour (9:00, 11:00, and so on).
- Pre-reservations optionally can be made (see limitations below), but if no actual appointment with a participant is made, these pre-reservations must be withdrawn not later than 1 week before the target date. This gives other researchers the opportunity to plan a participant in the released time slot.
- A maximum of 8 (pre-)reservations (8 slots of 2 hours) per week can be made by each researcher (for each research project). This limitation can be adapted by the EBL management according to the actual demand during the given period.
- If according to the lab management and/or the research directors, a researcher does not make fair use of the EEG lab, his/her reservations will be cancelled. Access to the EEG-lab will be cancelled if this occurs more than once.

Furthermore, for new users of the EEG labs or mobile equipment, it is mandatory to first have an introductory meeting with Christiaan Tieman (tieman@essb.eur.nl) of the EBL. He will introduce rules and regulations to new users and will show how to use the most important equipment.

Video labs

A request for booking of one or more rooms, possibly even months upfront, can be done with one of the co-ordinators. See section "Contact information".

Other labs

All other labs can be booked independently, with the following restrictions.
No bookings longer then 4 hours and not before an appointment is made with a subject. Not more then 4 weeks upfront.
To clarify this, to make appointments with participants, it is of course allowed to book several days and/or labs in the booking system, then immediately start making appointments and free up any unused time/labs when your "appointment-session" is finished.

Failure to do so will be recognised by the co-ordinators.

If you need a larger claim then the rules above allow, contact the management of the EBL. See section "Contact information".

Contact information

Co-ordination booking

Cubicles:	Anne Nederveen (anederveenpieterse@rsm.nl, 010 4081898, T08-13)
EEG Labs:	Freddy van der Veen (veen@essb.eur.nl, 010 4088678, T13-18)
Video labs(Psy):	Heleen van Mierlo (vanmierlo@essb.eur.nl, 010 408 8691, T12-39)
Video labs(RSM):	Anne Nederveen (anederveenpieterse@rsm.nl, 010 4081898, T08-13)
Other labs:	ebl@essb.eur.nl

Support

Keys/Equipment:	Christiaan Tieman (tieman@essb.eur.nl, 010 4089727, T12-36)
EURO:	Christiaan Tieman (tieman@essb.eur.nl, 010 4089727, T12-36)
ERPS:	Gizem Yalcin (yalcin@rsm.nl, 010 4089600, T10-24)
ERAS:	Psyweb team (edu.office.dpecs@essb.eur.nl)
Computers:	Marcel Boom (boom@essb.eur.nl, 010 4082038, T12-34)
EBL Assistant:	Marcel Boom (boom@essb.eur.nl, 010 4082038, T12-34)
Software availability:	Gerrit Jan de Bie (debie@essb.eur.nl, 010 4088796, T12-40)

Web locations

EURO system:	https://www.eur.nl/euro
ERPS system:	https://erps.sona-systems.com
ERAS system:	https://www.psyweb.nl
Booking system:	https://booking.ebl.eur.nl

DPECS-Psychology student-login request for the booking system:

"Psyweb ⇒ Research ⇒ Erasmus Behavioural Lab ⇒ EBL Booking system ⇒ <this form>"

ERIM Internal Review Boards (IRB):

https://www.erim.eur.nl/research-facilities/internal-review-boards

EBL route template

Please follow these directions to the EBL-waiting room.
You can only access the EBL via the South side of the Mandeville building. Take the escalator from the main entrance to the 3rd floor and walk straight on to the back of the building. Take the elevator to the 12th floor follow the signs to the waiting room where you will be picked up by the experiment leader.

For all other matters or emergencies regarding the EBL, contact
Christiaan Tieman (tieman@essb.eur.nl, 010 4089727, T12-36)

Annex A

Hardware

- foot pedals, to be used with E-prime
- Serial Response Box (SRBOX), millisecond accurate responses in E-prime
- big standing or tabletop pushbutton or turn-button, to be used with E-prime.
- pushbuttons in different shapes and sizes, that can be built-in into the table-top of certain labs, to be used with E-prime and possibly other stimuli-software.
- standing lamps, webcams, video camera's
- bright white leds, to be mounted with Velcro at any position, controllable from E-prime and possibly other stimuli-software.
- tactile stimulus, vibrating fingertip-actuators.
- your special request(s)...

Special measurements: Smokerlyzer(CO), hearing-test, autonomous measures (heart rate, skin conductance), alcohol tester, light/lumen meter.
Audio/video equipment: memo recorders, audio-video editing station (digitise).

Software

EBL lab subject stations:
- Audacity 2.1.2.0
- E-Prime 2.0 Professional SP2 2.0.10356 (Runtime Only)
- Google Chrome (Latest professional version, updated every night)
- GStreamer 1.0 1.12.2
- Java 8 Update 144 (64-bit) 8.0.1440.1
- Java 8 Update 144 8.0.1440.1
- K-Lite Mega Codec Pack 13.3.5 13.3.5
- Logitech-webcamsoftware 2.51
- MATLAB R2017a 9.2 + all toolkits
- McAfee Agent
- Microsoft .NET Framework 4.6.2 4.6.01590
- Microsoft PowerPoint Viewer 14.0.4763.1000
- Microsoft Silverlight 5.1.40416.0
- Microsoft Visual C++ 2005 Redistributable 8.0.61001
- Microsoft Visual C++ 2008 Redistributable - x86 9.0.30729.17 9.0.30729
- OpenSesame 3.1.9-py2.7-win32-1 3.1.9-py2.7-win32-1
- Presentation 200072617 (On request. A License Dongle is needed)
- PsychoPy2 1.85.3 1.85.3
- Psychtoolbox-3-PTB_Beta-2017-06-11_V3.0.14 (Matlab)
- PyGaze-0.5.1

Support Rooms:
- 7-Zip 16.04 (x64 edition) 16.04.00.0
- AcqKnowledge_4.1
- Adobe Illustrator CC 2017 21.1.0
- Adobe Photoshop CC 2017 18.1.1
- Adobe Premiere Pro CC 2017 11.1.2
- AdobeCCPhotoMovie 1.0.0000
- Audacity 2.1.2.0
- BrainVision Analyzer 2.1.1 2.1.1
- ELan 4.9.4
- EndNote X7 17.4.0.8818
- E-Prime 2.0 Professional SP2 2.0.10356
- Google Chrome (Latest professional version, updated every night)
- GStreamer 1.0 1.12.2

- IBM SPSS Statistics 23 23.0.0.0
- IBM SPSS Statistics 24 24.0.0.0
- JASP v0.8.4
- Java 8 Update 144 8.0.1440.1
- K-Lite Mega Codec Pack 13.3.5 13.3.5
- Logitech-webcamsoftware 2.51
- MATLAB R2017a 9.2
- McAfee Agent
- Microsoft .NET Framework 4.6.2 4.6.01590
- Microsoft Office Professional Plus 2016 16.0.4266.1001
- MLwiN 2.36 2.36.0.0
- Multiple Image Resizer .NET 4.5.2 4.5.2.2
- National Instruments Tools + Engine
- LabVIEW 8.6.1 8.6.426.0
- Notepad++ (64-bit x64) 7.5
- OpenSesame 3.1.9-py2.7-win32-1 3.1.9-py2.7-win32-1
- paint.net 4.0.18
- Presentation 200072617 (On request. A License Dongle is needed)
- PsychoPy2 1.85.3 1.85.3
- Psychtoolbox-3-PTB_Beta-2017-06-11_V3.0.14R for Windows 3.4.0 3.4.0
- PyGaze-0.5.1
- RStudio 1.0.143
- SMI Experiment Suite 3.7.68 (On request. A License Dongle is needed)
- SPM12 R6906
- WinMorph v3.01