

Open Source Software Licences

Imperial College's preferred open source software (OSS) licence is the BSD licence (3-Clause). Under an open source software (OSS) licence, the source code and, where relevant, object code are released to the licensee allowing developers to analyse, modify and enhance the software.

Open source release may not be the best mode to maximise the impact of your software. Software creators who wish to make compiled versions of their software (i.e. binaries) available for free, but not the source code itself, do not require an OSS licence and should contact [Research Services](#) for a bespoke software licence. For advice on societal impact of your software contact [Enterprise](#).

Flowchart Indicating which Open Source Software Licence to Use

Follow the flowchart below to determine the most appropriate open source software licence:



Types of Licence

OSS licences can fall under two categories; permissive and restrictive. Permissive licences include the BSD, MIT-style and Apache licences. Their permissiveness allows for modified or enhanced software to be released under any new form of licence including a commercial licence. As such, OSS code can be combined with proprietary code to form a software product that can be sold under a commercial licence.

Restrictive licences comprise the GNU family of licences promoted by the Free Software Foundation (<http://www.gnu.org/>). They are constructed around the ‘Copyleft’ principle which requires derivative software to be distributed under the same OSS licence terms. It is a method for making software available and enabling them to be modified provided that all modified and extended versions of the program are made available under the same terms.

GNU licences can be covered by ‘strong conditions’: e.g. GPL (General Public Licence). The goal of the GPL is to grant everyone the freedom to copy, redistribute, understand, and modify a program. If the modified software is distributed; all software must be covered by the same original GPL licence. This includes releasing the source code of any modification or additions. GPL-licensed software cannot be incorporated into a commercial system and then re-released under a commercial licence.

Alternatively, there are less restrictive licences for ‘weak conditions’: e.g. LGPL (Lesser General Public Licence). With this licence, it is allowable to have a variation of parts released under different licences e.g. some parts of code must be distributed under original licence; other parts may be distributed under different licences. Precise areas of code need to be defined and attributed to a particular licence. GNU LGPL is commonly used for software libraries.

College Preferences

Use of a permissive [BSD 3-clause licence](#) is the preferred suggestion (see example below).

Copyright notice must be included. This should refer to “Copyright © 2022, Imperial College, London. All rights reserved.” only. This is to ensure a consistent branding message is maintained.

A copy of the licence terms and conditions must be placed or linked prominently on the webpage.

A copy of the licence must be distributed alongside the code on any open source software repository where the code is released, and also placed or linked prominently on any webpage associated with the software.

Note that code repositories such as [GitHub provide licence templates](#) and also support for detecting licence files provided with code and highlighting the licence and terms in a clear and easy to read manner.

An example of the 3-clause BSD licence template is below:

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1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
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The copyright notice “© 2022, Imperial College, London. All rights reserved” at the start of the BSD-3 licence (above), should include each year content was added to the copyrighted material, not just the current year. For example, if additional code is added over a period of several years the copyright notice should include the entire period of code writing i.e. “© 2020 - 2023, Imperial College, London. All rights reserved.” The copyright notice can either use the word “copyright” or the © symbol.

Derivative software

Modification of software code may result in the creation of derivative software that can be licensed under a different type of licence. The licence for the derivative software is dependent on the type of

licence the original software was released under. Modifications or derivatives can be released as follows:

Original Software Licence	New Software Licence
GPL	GPL
LGPL	GPL or LGPL
MIT / BSD 3-clause etc.	Same or another licence

Areas for Consideration when Selecting a Suitable OSS licence

Complying with one software licence can result in inconsistencies between and when complying with other software licences. Follow the guidance below when choosing an appropriate OSS licence:

1. *Sponsors' terms* - Before releasing software, any sponsor rights must be considered as there may be restrictions which prevent the source code of the software from being publicised as open source. Any program, containing other software/code provided by a collaborating third party or which has been downloaded as open source software may contain specific or restrictive licence terms.
2. *Term's for using embedded code* - All third party code and materials which have been embedded in the software should be considered. The related licensing terms should be reviewed and complied with.
3. *Multiple OSS licences* - Any application which links many different components has the potential to be covered by several different licences. In order to establish which licences may be used, a list of each component that the program uses and the licence of that component should be prepared. This enables a licence review to be carried out with a focus upon potential encumbrances upstream in regard to future funding and use. When selecting a licence for derivative software that includes code acquired under several OSS licences it is wise to release the derivative work under the licence with the strongest terms (see table above) i.e. if the derivative software includes MIT, BSD and GPL licensed software then the new software should be released open source under a GPL licence.
4. *Software bundles* - GPL-licensed software may be distributed alongside, i.e. in addition to the software of a commercial product (e.g. a robotic system requiring multiple software packages). In order for this to be valid and not infringe the licence terms, the free and non-free programs should be wholly independent of each other and not packaged in a way that would suggest they are effectively a single program.
5. *Discussions with [Enterprise](#)* – Please contact your [Faculty's Industry Partnerships and Commercialisation Team](#) in [Enterprise](#) who will be able to provide you with timely and appropriate advice and guidance on various options for maximising the [societal impact of your software](#) or routes to making the software's development financially sustainable. Please note, if you wish to generate software for a particular purpose, it is important to ensure that the terms governing the incorporation of any open-source software is compatible with the intended end use.

N.B. Programs used to edit the source code, or to compile it, or study it, or record it, or are required to operate it, do not usually effect or cause problems with the licensing of that source code.

Sharing research software

College has [guidance on sharing research software](#) and making use of an online source code repository service that supports version control and other software development tools such as file hosting, bug tracking and issue tracking. Popular code repositories include [GitHub](#), [BitBucket](#) and [GitLab](#). Hosted services are especially useful for working with collaborators across more than one institution.

Imperial College has a licence with GitHub that allows anyone writing software in the Imperial community to create both public and private code repositories at no cost, within the [Imperial College GitHub](#) “organisation”. For further information see [Working with GitHub.com](#). Creators of open-source software are encouraged to add their projects to the [Imperial College Research Software Directory](#).

If your project requires extra security beyond that provided by private repositories in GitHub.com you should consider using the College-hosted GitHub Enterprise service. GitHub Enterprise offers similar functionality to GitHub.com, but all code is stored on-premise and a College user account is required to access the service. See [Working with GitHub Enterprise](#) for more information.