

# Rules BAPC2014

## 1. Definitions

*BAPC*: The Benelux Algorithm Programming Contest 2014, organized by GEWIS. It will take place on October 19th, 2014.

*GEWIS*: Study association for Mathematics, Computer Sciences, at Eindhoven University of Technology.

*Organisation*: The members of the organizing committee of GEWIS.

*Website*: The website, maintained by the organisation and available at <http://www.bapc.eu>.

*Jury*: The group of people responsible for making the problems and checking the solutions submitted by the participants.

*Tech*: The group of people responsible for the system.

*Runners*: Those responsible for delivering print-outs, answering questions and various other tasks.

*Crew*: Organisation, members of the jury, tech and runners.

*Participant*: Member of a participating team that competes in BAPC.

*Submission*: The submission of a solution by a team.

## 2. Organisation

2.1 The organisation consists of members of GEWIS.

2.2 The organisation has formed a jury which consists of students, staff of different universities, and professionals from industry.

2.3 The organisation has formed the Tech, a group which consists of students of the Eindhoven University of Technology.

2.4 The organisation will appoint runners who will watch over the competition areas during the contest, hand out the print-outs and balloons and will be available for practical questions during the BAPC.

2.5 All crew members will be recognizable by their shirt and/or badge.

## 3. Participation

### 3.1 Introduction

3.1.1 Participation is only possible in teams of up to 3 persons.

3.1.2 There are two group stages: one for student teams and one for business teams.

3.1.3 Changing the composition of a team is only possible with the permission of the organisation.

3.1.4 The organisation decides how many teams from each institution are allowed to compete. The organisation will consider the number of interested contestants from each institution.

3.1.5 The organisation has the right to deny the participation of teams before the start of the contest.

### 3.2 Student teams

A student team:

3.2.1 may participate for free.

3.2.2 consists of students from the same institution and who are not participating in another team.

3.2.3 has a coach, which is the contact person of a team. This can be a team member or a student or staff member of the institution.

3.2.4 participates in the student teams pool for the title 'Winner of the Benelux Algorithm Programming Contest 2014' with the cup and the prize money of 1024,- 512,- and 256,- euros for first, second, and third places respectively.

3.2.5 consists of students who are eligible for the North Western European Programming Contest 2014.

### 3.3 Business teams

A business team:

3.3.1 pays the registration fee of 500,- euros, before the start of the contest.

3.3.2 consists of persons who are employed by the same company or institution.

3.3.3 participates in the business teams pool for the title 'Winner of the Benelux Algorithm Programming Contest 2014' and the prize money of 512,- euros.

## 4. The Contest

### 4.1 Introduction

4.1.1 The language used during the contest is English.

4.1.2 The contest lasts for 5 hours.

4.1.3 From the beginning until one hour before the end of the BAPC, the scores are displayed.

### 4.2 Problems

4.2.1 The jury will provide at least 8 and at most 12 problems.

4.2.2 When a problem is unclear a 'clarification request' can be sent to the jury. The jury will respond to this request. If the response is relevant to all teams, the jury will send the response to all teams.

4.2.3 The jury has the right to change or withdraw problems during the contest. When this happens the jury will inform all teams.

### 4.3 System

4.3.1 A workplace will be available for each team and all workplaces will be equal in equipment.

4.3.2 A solution has to be written in C, C++(11), C#, Haskell or Java (unless the problem statement explicitly states otherwise). Note that C# and Haskell are not allowed during the NWERC.

4.3.3 The jury decides per programming language which libraries and function calls are allowed to be used in the solutions.

4.3.4 All prints made by the teams will be brought by a runner. Participants are not allowed near the printers.

4.3.5 A team is allowed to bring up to 25 A4-sized pages, printed one-sided or up to 12 A4-sized pages, printed two-sided, of documentation. Each team member is allowed one identical copy.

4.3.6 A team is allowed to bring a dictionary; English to their native language.

4.3.7 A team is not allowed to bring software.

### 4.4 Department rules

4.4.1 The house rules apply to everybody inside the building.

4.4.2 Inside computer rooms eating, drinking, smoking and talking in a loud voice is not allowed.

4.4.3 The use of hardware, including all calculators, which is not approved by the organisation is strictly forbidden, with exceptions of simple watches and medical equipment.

4.4.4 Changing of hardware or operating software is strictly forbidden.

4.4.5 During the contest, communication within the team and crew is allowed. Communication with everyone else is forbidden during the contest.

4.4.6 Participants will follow orders given by the crew.

4.4.7 Participants will wear the shirt and badge provided by the organisation (company members are allowed to wear a shirt with a clear company logo on it).

## **4.5 Judgement**

4.5.1 Each submission is acknowledged.

4.5.2 For each problem, the jury has a correct solution and test data.

4.5.3 A submission is correct when it has a solution to the input in a time limit decided by the jury and the output is the same as the output of the jury (unless the problem statement explicitly states otherwise). This time limit is not announced to the teams.

4.5.4 The winner of a pool is decided by (in order):

1. The team with the most correctly solved problems.

2. The team with the least solving time. This is the sum of the time needed for every solved problem (defined as the time between the beginning of the contest and the submission of the first correct solution), plus a 20-minute penalty for each wrong submission until the first correct submission. (Incorrect solutions for which a team has not submitted a correct solution or incorrect solutions submitted after a correct solution was accepted do not add to the solving time.)

3. The team that first submitted its last accepted problem is ranked higher. In case a tie still remains, the team that first submitted its second-last accepted problem is ranked higher, and so on. In the event that this does not resolve the tie, the ranks will be determined by chance.

4.5.5 The jury is responsible for everything that has to do with the problem set and can be contacted for this through the 'clarification requests'.

## **5. Special rules**

5.1 The organisation has the right to disqualify teams for misbehavior or breaking the rules.

5.2 The organisation have the right to stop the contest, extend the contest time, temporarily block submissions for all teams or change the scores in exceptional conditions.

5.3 In situations to which no rule applies, the organisation decides.