



# World Finals Rules for 2016

#### Mission

The ACM International Collegiate Programming Contest (ICPC) provides college students with opportunities to interact with students from other universities and to sharpen and demonstrate their problem-solving, programming, and teamwork skills. The contest provides a platform for ACM, industry, and academia to encourage and focus public attention on the next generation of computing professionals as they pursue excellence. (from the ICPC Policies and Procedures)

#### Introduction

The contest is a two-tiered competition among teams of students representing institutions of higher education. Teams first compete in Regional Contests, held around the world from September to December each year. The winning team from each Regional Contest advances to the ACM International Collegiate Programming Contest World Finals that is typically held between March and June. Additional high-ranking teams may be invited to the World Finals. A maximum of 128 teams will be invited. These rules are subject to change.

### Organization

The ICPC is organized according to the ICPC Policies and Procedures. The Executive Committee, chaired by the Executive Director, sets the policy and general rules for the conduct of the contest. The Executive Director is solely responsible for interpreting the rules and for ruling on unforeseen situations.

### World Finals Site and Dates

The 2016 World Finals will be held in Phuket, Thailand, May 15 - 20, 2016.

#### **Team Requirements**

Teams qualify to advance to the World Finals through Regional Contests. Only one team from a given institution may advance to the World Finals. Contestants and registered student team members will be provided free





one-year memberships in ACM. No team member on the qualifying team may have competed as a contestant in two previous World Finals.

The coach of a qualifying team is the point-of-contact prior to and during World Finals activities. A contestant of a team may not serve as the coach.

The coach must complete certification at the Team Certification Web Site within five (5) business days of notification. Qualifying teams will be issued an invitation by email and postal mail (if requested) soon after completing certification.

Qualifying teams requiring visas must initiate the process of applying for visas within 10 business days of being issued an invitation to apply for a visa. Teams failing to comply with any of these requirements will be ruled ineligible to compete in the World Finals. Upon completion of these requirements, a qualifying team will be advanced to the World Finals. A team advancing to the World Finals will be comprised of the same three members as when it qualified. (Reserves are not allowed at the Finals.) In the event that a team member is unwilling, unable or unfit to compete in the World Finals, the coach must notify the manager in a timely manner. A team member who is unwilling or unfit to compete in the World Finals will be disqualified from further ICPC competitions. The team member may appeal disqualification to the Appeals Committee.

At on-site registration, participants must provide picture ID (passport, driver's license, etc). Contestants must show proof of enrollment at the university during the term of the regional contest at which they qualified. A letter on university stationery with the signature of a university official accompanied by an English translation is sufficient.

### Attendance

Finalists must attend all required events from On-Site Registration to Celebration as indicated in the Schedule of Events. Failure to attend any required event will result in disqualification and forfeiture of scholarships and prizes. Coaches must be accessible during On-Site Registration, Dress Rehearsal, the World Finals, and the Closing Ceremony.

#### Support and Prizes

Each finalist team will be provided with hotel accommodations for the coach and three contestants according to dates published on ICPC Invitations. The hotel accommodations will provide gender privacy. The





teams and coaches will be treated to a full schedule of activities including a full course of complimentary food functions.

Transportation to the World Finals is the responsibility of the finalists. The ICPC encourages teams to raise funds for transportation and

extracurricular activities from local sources to better strengthen community ties among academia, industry, and government.

Teams finishing in the top four positions will be awarded Gold Medals.

Those teams finishing fifth through eighth place will be awarded Silver Medals. Those teams finishing ninth through twelfth place will receive Bronze Medals. Additional Bronze Medals may be awarded.

The highest scoring team is the World Champion and will receive the World Champion Cup and plaques. The other top twelve teams, the North American Champions, the Latin American Champions, the European Champions, the South Pacific Champions, the Asian Champions, and the Africa & Middle East Champions will also receive plaques.

The World Champion team will be awarded \$16,500. Each of the other three Gold Medal teams will be awarded \$7,500. Each Silver Medal team will be awarded \$4,500. Each Bronze Medal team will be awarded \$2,250. Courtesy of the UPE Computer Science Honor Society, First Solution Award will be \$1500 and First to Solve Problem "X" will be \$1050 (for all but first problem solved).

# Conduct of the Finals

Ten or more problems have been posed in recent World Finals. Problems will be posed in English. During the contest, all communications from contest officials to contestants will be in English. Each team may identify an interpreter for translating questions posed by contestants to contest officials. Contestants may bring electronic natural language translators provided that they do not support math operations. Solutions to problems submitted for judging are called *runs*. Each run is judged as accepted or rejected, and the team is notified of the results. *Rejected runs* will be marked as follows:

- run-time error
- time-limit exceeded
- wrong answer

Notification of accepted runs may be suspended at the appropriate time to keep the final results secret. A general announcement to that effect will be





made during the contest. Notification of rejected runs will continue until the end of the contest.

A contestant may submit a claim of ambiguity or error in a problem statement by submitting a *clarification request*. If the Judges agree that an ambiguity or error exists, a clarification will be issued to all contestants. While the contest is scheduled to last five hours, the Finals Director has the authority to lengthen the contest in the event of unforeseen difficulties. Should the Contest duration be altered, every attempt will be made to notify contestants in a timely and uniform manner.

#### Scoring of the Finals

The World Finals Judges are solely responsible for determining the correctness of submitted runs. In consultation with the World Finals Judges, the Director of Judging is responsible for determining the winners of the World Finals. They are empowered to adjust for or adjudicate unforeseen events and conditions. Their decisions are final.

Teams are ranked according to the most problems solved. Teams placing in the first twelve places who solve the same number of problems are ranked first by least total time and, if need be, by the earliest time of submittal of the last accepted run.

The *total time* is the sum of the time consumed for each problem solved. The *time consumed* for a solved problem is the time elapsed from the beginning of the contest to the submittal of the first accepted run plus 20 penalty minutes for every previously rejected run for that problem. There is no time consumed for a problem that is not solved.

## **Computing Environment**

The World Finals programming language tools include Java, and C/C++. See the Programming Environment Web Site, for detailed configuration information. Prior to the World Finals, the judges will have solved all problems in Java and C/C++.

Each team will be provided with a single computer and a calculator. All teams will have equivalent computing equipment.

Contestants may not bring any printed materials or machine-readable versions of software or data to the Contest Area. Contestants may not bring their own computers, computer terminals, calculators, or other electronic devices to the Contest Area.





Each team member may bring an unannotated natural language printed dictionary. On-line reference materials will be made available as described in the Reference Materials section of the Programming Environment Web Site. Each team will be permitted three copies of the **Team Reference Document** described in the **On-Site Registration Instructions**.

#### **Contestant Conduct**

DO NOT TOUCH ANYTHING at the team workstations until so directed by the Finals Director.

Contestants are not to converse with anyone except members of their team and personnel designated by the Finals Director. Systems support staff may advise contestants on system-related problems such as explaining system error messages.

A team may be disqualified by the Finals Director for any activity that jeopardizes the World Finals such as dislodging extension cords, unauthorized modification of contest materials, or distracting behavior.